BESSMER

1962 | 1963

Loyola

COLLEGE

MONTREAL • CANADA

- ARTS
- SCIENCE
- ENGINEERING
- COMMERCE

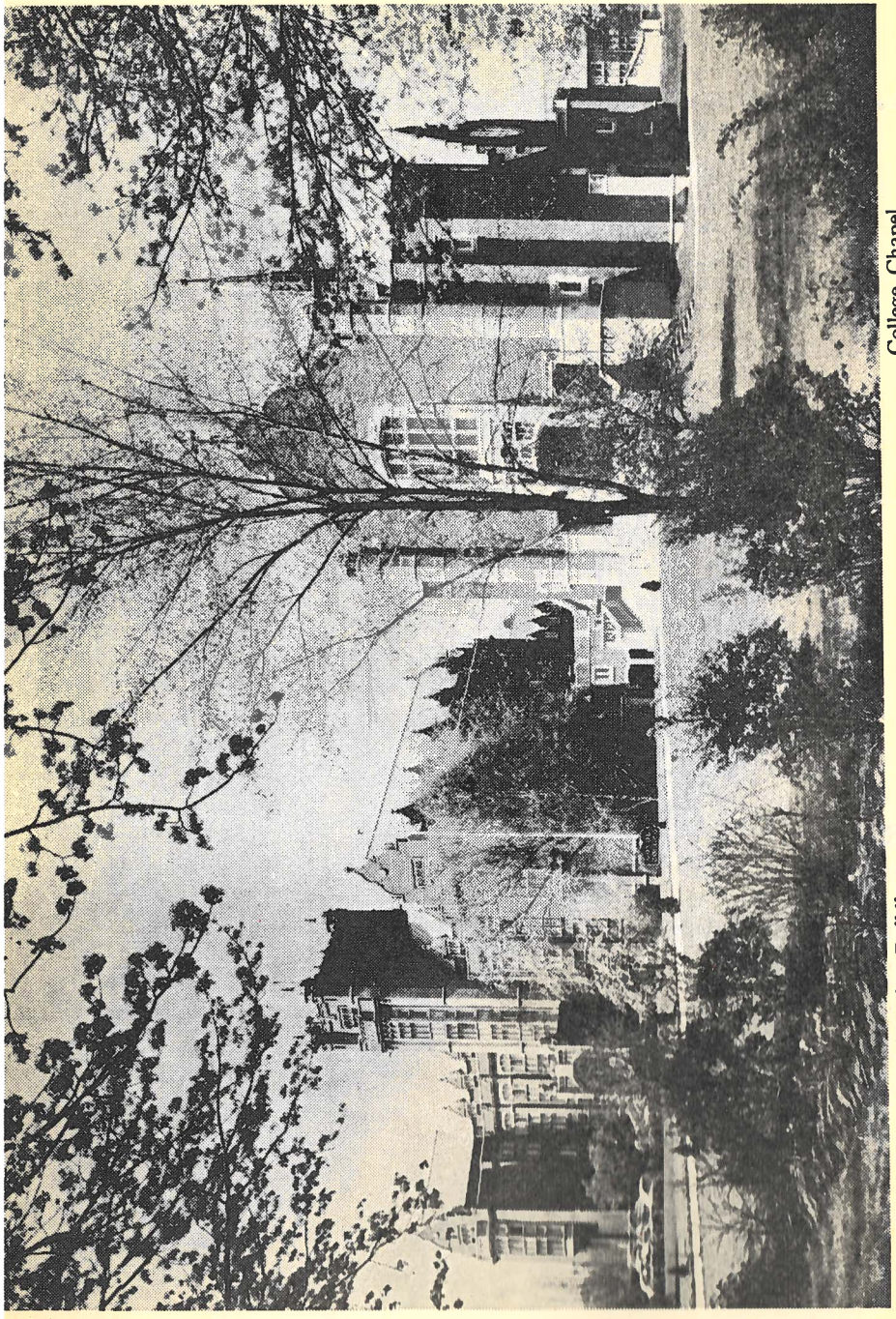
A.M.D.G.

1962 | 1963

General Calendar

Loyola College

ARTS
SCIENCE
ENGINEERING
COMMERCE



College Chapel

Administration Building

LOYOLA COLLEGE — MONTREAL

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ACADEMIC CALENDAR

1962-1963

1962

MONDAY, JULY 16.	Last day for notification of intention to return and continuation subject desired.
MONDAY, AUGUST 6.	Last day for making application for supplemental examinations.
MONDAY, AUGUST 27.	Supplemental examinations begin.
MONDAY, SEPTEMBER 17.	Registration of First Year students: 10.00 a.m.
TUESDAY, SEPTEMBER 18	Registration of Second, Third and Fourth Year students: 9.00 a.m. to 12.00 noon and 1.00 p.m. to 5.00 p.m.
	Opening Exercise for Freshmen in the Auditorium: 10.00 a.m.
WEDNESDAY, SEPTEMBER 19	Father Rector's talk in Auditorium: 10.00 a.m. Upper Classmen's Open Retreat: 12.10 p.m.
THURSDAY, SEPTEMBER 20.	First term lectures begin. Upper Classmen's Open Retreat: 12.10 p.m.
FRIDAY, SEPTEMBER 21	Lectures: 9.10 'a.m. – 12.00 p.m. Upper Classmen's Open Retreat: 12.10 p.m.
MONDAY, OCTOBER 8.	Thanksgiving Day — Full holiday.
FRIDAY, OCTOBER 12.	Freshman Orientation Retreat: 9.30 a.m. to 3.00 p.m.
SATURDAY, OCTOBER 13.	Freshman Orientation Retreat: 9.30 a.m. to 1.30 p.m.
THURSDAY, NOVEMBER 1.	All Saints' Day.

ACADEMIC CALENDAR

1962-1963

1962

FRIDAY, NOVEMBER 9.	11.00 a.m. — Anniversary Mass for the deceased members of the staff and students.
SATURDAY, DECEMBER 8.	Feast of the Immaculate Conception. Full holiday.
SATURDAY, DECEMBER 22.	Christmas vacation begins.

1963

THURSDAY, JANUARY 3.	Mid-year final examinations begin in all faculties.
MONDAY, JANUARY 7.	Second term lectures begin.
FRIDAY, JANUARY 25.	Father Rector's Holiday.
THURSDAY, MARCH 7.	Feat of St. Thomas Aquinas.
FRIDAY, MARCH 8.	Celebration of the Feast of St. Ignatius Loyola.
SUNDAY, MARCH 17.	St. Patrick's Day.
WEDNESDAY, APRIL 10.	Easter recess.
TUESDAY, APRIL 16.	Lectures resumed.
SATURDAY, APRIL 20.	Last day of Lectures.
WEDNESDAY, APRIL 24.	Final Examinations.
SATURDAY, MAY 25.	Convocation.

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HISTORY OF LOYOLA COLLEGE

The origins of Loyola College may be traced to the opening of the Collège Ste.-Marie in 1848, which resumed in Montreal the work of the historic Jesuit College of Quebec, opened in 1635. From its conception the classical course at the Collège began with both languages, French and English, on an equal footing. From 1888 to 1896 the classical course in English was operated as distinct from that in French, both considered separate units within one institution.

On September 2, 1896, Loyola College was opened at 2084 St. Catherine Street West. Three years later, on March 10, 1899, the College was incorporated by an Act of the Quebec Legislature, as an arts college in the traditional classical sense of arts in the Province of Quebec.

Laval University officially extended its Bachelor of Arts Degree to Loyola students under the special privileges granted by the Holy See in the Constitution "Jamdudum" which gave to Loyola College autonomy in the organization of its courses of study and in setting and correcting examinations. A similar arrangement now obtains with the University of Montreal.

Since the early days of Loyola, many changes have occurred, especially evident in the evolution of curriculum which more and more set the College in the Anglo-Canadian tradition. For instance, the eight-year course was broken up into two distinct four-year units (1919) and options were introduced (1921), confirming three distinct courses, at least in the last two years of college: Arts (General), Arts (Pre-medical), Arts (Pre-Science).

In 1943 other changes were initiated which transformed Loyola into the developed academic institution it is today. A distinct Faculty of Science was established, offering Honours Chemistry and Honours Mathematics courses; the first three years of Engineering were introduced, in Civil, Mechanical, Mining, Chemical and Metallurgical Engineering, as well as in Engineering Physics. A Faculty of Commerce was opened in 1948; major fields in Economics, English and History were established in 1953, and Honours courses in these subjects in 1958. An Extension Department and a Summer School were founded in 1957 to fill the need for those unable to pursue their studies during the day and to provide a public service.

The academic world soon recognized the new status of Loyola: the Chemical Institute of Canada (CIC) approved the Honours Chemistry program as fulfilling all the requirements for professional standing in its Institute; the Engineering Institute of Canada (EIC) recognized the competence of Loyola's Engineering Department; the Institute of Chartered Accountants of Quebec accepted

the work done in the Commerce course, a major in Accounting, and granted the same privileges to Loyola graduates as were conferred on graduates of other older institutions; the Canadian Conference of Canadian Universities and Colleges accepted Loyola as an autonomous member. All faculties of the College have prepared students for and have sent them to the graduate schools of American, British and Canadian universities, which have conferred Engineering, Master's and Doctoral degrees on them.

The growth of Loyola has made noticeable changes; for example there are now four faculties and fourteen departments; the number of lay members of the staff has increased very greatly; and, there has been a very ambitious building program established to provide the necessary physical facilities.

Besides the Regular courses Loyola also offers Extension courses in the evening. Most of these are given during the Regular winter session, but some are offered in the evening during the summer as well. Credits in Extension courses can count towards a B.A., B.Sc. and a B.Com. For more information about Extension courses write the Dean of Extension, Loyola College, Montreal 28.

AIM OF LOYOLA COLLEGE

The aim and purpose of Loyola College has been stated very well by Henry Cardinal Newman in a Sermon preached in the University Church at Dublin entitled "Intellect, the Instrument of Religious Training" in which he states:

> . . . I wish the intellect to range with the utmost freedom, and religion to enjoy an equal freedom; but what I am stipulating for is, that they should be found in one and the same place, (i.e. religion and science) and exemplified in the same persons . . . I wish the same spots and the same individuals to be at once oracles of philosophy and shrines of devotion. It will not satisfy me, what satisfies so many, to have two independent systems, intellectual and religious, going at once, side by side, by a sort of division of labour, and only accidentally brought together. It will not satisfy me, if religion is here and science there, and young men converse with science all day, and lodge with religion in the evening. It is not touching the evil, to which these remarks have been directed, if young men eat, and drink and sleep in one place, and think in another; I want the same roof to contain both the intellectual and moral discipline. Devotion is not a sort of finish given to the sciences; nor is science a sort of feather in the cap, if I may so express myself, an ornament and set-off to devotion. I want the intellectual layman to be religious, and the devout ecclesiastic to be intellectual . . . Sanctity has its influence; intellect has its influence; the influence of sanctity is the greater on the long run; the influence of intellect is greater at the moment. Therefore in the case of the young, whose education lasts a few years, where the intellect is, *there* is the influence. Their literary, their scientific teachers, really have the forming of them . . .

This is Loyola's reason for existence; this is Loyola's aim.

FACILITIES

BUILDINGS. Loyola College consists of seven buildings located on a fifty-acre site in the west end of Montreal. These structures are: the Refectory Building (built in 1916); the Administration Building (1927); the Stadium and Cafeteria (1923); the Chapel and Auditorium (1933), the Central Building (1947); the Student Residence (1960); and the Drummond Science Building, (1962). In the near future, the recently remodelled Junior Building will become available for lecture rooms and offices; a new Library Building will provide additional study areas and improved library facilities; and a new Student Residence will have accommodations

for 300 students. At a later stage, an Engineering Building, a new Gymnasium, and a Student Union Building, will add greatly to the facilities of the College.

LECTURE ROOMS. The 25 lecture rooms have a total seating capacity of 1,600. The amphitheatre in the Drummond Science Building can seat 350 students; the auditorium has a seating capacity of 550.

LIBRARY. The present main library houses over 40,000 volumes and more than 250 journals and periodicals. The library in the Drummond Science Building can seat 90 students. Reading rooms in the Central and Refectory Buildings can accommodate a further 220 students.

LABORATORIES. About 60,000 square feet of floor space is devoted to science laboratories, shops, and offices. In addition, there are five engineering laboratories, a fully-equipped language laboratory, and a computer room housing an IBM 1620 Data Processing System and associated equipment.

MAIN CHAPEL. The College Chapel has a seating capacity of about 500.

RESIDENCE. The present student residence has rooms and facilities for 30 students. The new residence, which is scheduled for completion in the near future, will provide accommodation for 300 students.

STADIUM. The stadium has a regulation-size artificial ice surface.

INCOME AND NEEDS OF THE COLLEGE

The endowment of Loyola College in buildings and educational equipment is in excess of *six* million dollars. The Development Plan of Loyola College calls for a Students' Residence, a Students' Union, a Library and a Gymnasium. The present High School Building will have to be replaced by a building on another site.

It is expected the Government of the Province of Quebec will provide substantial financial help in this physical expansion. However, the College must find funds for its part of the expansion costs and to cover other capital expenditures for which it will receive little or no assistance from the Province.

Though *there are scholarships* and bursaries offered presently, they are inadequate to meet the increasing number of requests from talented students for financial aid in obtaining a college and university education. Both annual and founded scholarships and bursaries are needed for this worthy purpose. The names of the

donors, or the names of the persons in whose memory they are given, will compose the titles of these scholarships and bursaries.

Gifts or bequests to Loyola College for religious, educational or *capital expansion purposes* will permit the donor to enjoy the benefits from the relevant exemptions under our tax laws. For the guidance of those who may desire to make benefactions to the College by testamentary bequest, the following form is suggested:

I give and bequeath to Loyola College, Montreal, in the Province of Quebec,.....dollars.

SERVICES TO STUDENTS

RELIGIOUS ACTIVITIES

In order to make *concrete* and *personal* the religious truths the students have studied scientifically in the Theology courses, Loyola College offers a program of religious activities calculated to nourish and deepen their personal and apostolic dedication.

Retreats

Two open retreats will be given at the beginning of the school year: for students of 2nd, 3rd and 4th year from September 19 to 21, and for Freshmen on October 12 and 13. Two closed weekend retreats for 4th year students exclusively will be given from February 8 to 10 and February 22 to 24. Three closed weekend retreats for students of 1st, 2nd and 3rd year will be given from February 15 to 17, February 22 to 24 and from March 1 to 3. Attendance at the Freshmen opening retreat, October 12 and 13, is obligatory for all Catholic Freshmen.

Daily Mass

A special Students' Mass is offered daily, Monday to Friday, at 1.05 p.m., in the College Chapel. Two confessors are always available during the Mass.

Student Counselling

In order to provide students with the opportunity of obtaining guidance and advice on a personal level, the Student Counsellor is always available for consultation. Students are welcome to visit him in his office, or to contact any of the other Faculty members who have been appointed to assist in this work.

Sodality of Our Lady

This organization was established by the Society of Jesus four centuries ago and commissioned by Pope Pius XII in 1948 to meet the needs of eth Church by forming competent and dedicated lay leaders. The members conduct regular meetings in order to assist the intellectual, social and spiritual progress of the College, and to promote work in the hospitals and among the poor and underprivileged of the City.

Apostleship of Prayer

The Apostleship is an association with a two-fold aim: first, to instil into the students that apostolic spirit which, as public men, it is hoped they will later on exercise in the world; and secondly, to join in the great work of reparation for the blasphemy daily offered to Our Lord. The public exercises consist of monthly meetings of reparation to the Blessed Sacrament on the first Friday of each month.

THE MILITARY SERVICES

There are three military plans to qualify the undergraduate as an officer in the Canadian Forces: Naval (UNTD), Army (COTC), and Airforce (URTP). To be eligible the undergraduate must be seventeen years or older, be medically fit and meet the enrolment standards. He must be a Canadian citizen or a British subject resident in Canada with the certificate of a landed immigrant.

U.N.T.D.

The University Naval Training Division is a plan whereby suitable undergraduates are given three years training leading to a commission in the R.C.N. Reserve. Loyola cadets undergo winter training one evening a week at H.M.C.S. Donnacona, 2055 Drummond St., Montreal, and are sent to either the Atlantic or Pacific coast during the summer months. They are given training in such subjects as navigation, communications and seamanship, including a period of approximately four weeks sea training in an operational ship. On these courses they visit various ports of call in the Western Hemisphere.

Probationary Cadets are selected early in October of each year and appear before a selection board in January to become confirmed as cadets in the R.C.N. Reserve.

Loyola College Contingent C.O.T.C.

The purpose of the Loyola College Contingent, Canadian Officers' Training Corps (COTC) Program is to provide a means whereby Loyola undergraduates can qualify for appointment as commissioned officers in the Canadian Army.

Through the Canadian Officers' Training Corps the student can develop leadership, gain useful technical knowledge and qualify for the prestige of the Queen's Commission with the advantages of some earnings during the academic year and full time summer employment at good rates ($225.00 a month and transportation, uniforms, food, accommodation and medical care).

The training program covers a minimum of two and a maximum of three years. Each training year has two parts: a theoretical phase of approximately 64 one hour periods, which is taken at the Loyola C.O.T.C. Mess during the academic year, and a practical phase consisting of a minimum of 12 weeks to a maximum of 22 weeks of instruction each summer. The practical training is normally taken at a corps school or a unit of the Regular Army. The third and final practical phase is normally taken with a Regular Army unit. where the theory and practical training given previously is put to the test, and the talents of the young officer are developed. The young officer may be selected for training with the Canadian Forces in Europe.

Applications for enrolment in the Loyola College Contingent, C.O.T.C. are accepted up to January 15th of each year. Accepted students are enrolled as Officer Cadets and retain this status for the first two years.

Members of the C.O.T.C. who complete the first two theoretical and practical phases of training and intend to continue their college courses, will be commissioned in the rank of 2nd Lieutenant. On completion of the third phase of theoretical and practical training and attainment of the required educational standards, they are eligible for immediate appointment to the Regular Army or Militia in the rank of lieutenant and are qualified to the rank of Captain in the Militia.

Capt. J. A. Kisielius, Resident Staff Officer, Loyola College, representing the Regular Army on the Campus may be consulted at the C.O.T.C. quarters in the Stadium Building.

U.R.T.P.

Successful candidates in the University Reserve Training Plan (RCAF), are enrolled in the Primary Reserve in the rank of Flight Cadet.

For Flight Cadets, each year is divided into two training periods:

(1) Winter Training: This takes place at McGill University, 475 Pine Ave. W. The Winter Training syllabus provides for 64 hours of lectures and parades during each academic year. The training is designed to familiarize U.R.T.P. personnel with the duties and responsibilities of junior officers and to give a general knowledge of the R.C.A.F., its functions and its role in defence. The syllabus includes lectures in world affairs, geopolitics, air power, civil defence and military history.

(2) Summer Training: This is carried out at R.C.A.F. Stations. A maximum of 22 weeks of R.C.A.F. training and employment terminating on or before September 15th is offered. All successful candidates for the U.R.T.P. attend officers' school in the first half of the first summer. Those who are enrolled in a branch for which a course is conducted then proceed on formal course training while the remainder receive supervised employment at Stations across Canada. Formal courses may be of one, two, or three summers' duration at an overseas unit, depending on the branch of training.

Information covering U.R.T.P. may be had by contacting F/L. J. C. Sloan at VI. 4-1932 or at 475 Pine Ave., W.

Regular Officer Training Plan (R.O.T.P.)

The Armed Forces of Canada subsidize a limited number of undergraduate college students who are willing to accept a military service obligation as a commissioned officer under the provisions of the Regular Officer Training Plan.

College students found acceptable will be enrolled in the service of their choice (Royal Canadian Navy, Canadian Army (Regular), or Royal Canadian Air Force) as an Officer Cadet on a career basis. Upon achievement of degree status and fulfillment of military training requirements, Officer Cadets are promoted to commissioned rank and are required to serve a minimum of three years immediately thereafter in the service which sponsored their training. After such service, an officer may be released at his own request providing a period of national emergency does not exist.

A student may qualify for subsidization under this Plan if: a) he is a Canadian citizen or British subject resident in Canada with the status of a landed immigrant; b) he has attained his 16th but not his 20th birthday on the 1st of January of the year of enrolment in College; c) he is physically fit for enrollment in the branch and service of his choice; d) he is single and intends to remain so during his Officer Cadet training period.

Successful applicants will receive financial assistance as follows: pay — $65.00 per month; living allowance — $65.00 per month; holidays up to thirty days annually with full pay and allowances. Tuition and other essential college fees are provided by the Department of National Defence. Text-book and instrument grant are $75.00 per year. Medical and Dental care expenses, uniforms and accoutrements are provided by the Department of National Defence. Aircrew Trainees receive $75.00 per month flying pay while undergoing summer training.

As an Officer Cadet, each student will undertake a) continuation of a normal academic workload and maintenance of a satisfactory standing therein; b) military training, which is divided into two phases, theoretical and practical, taken during the student's first, second, third and fourth year as an R.O.T.P. Cadet.

(i) The Theoretical Phase consists of academic military studies presented as lectures, lecture demonstrations and discussions on subjects that will provide a background for the practical phase.

(ii) The Practical Phase is full time duty with the Regular Forces taken during the summer vacation.

Students interested in the R.O.T.P. may obtain further information and application instructions from Capt. J. A. Kisielius, R.S.O., Loyola College C.O.T.C.

LOYOLA ALUMNI ASSOCIATION

The Loyola Alumni Association has as its object to advance the interest and to promote the welfare of Loyola College and of the Association and its members.

A General Meeting is held every year, generally at the College. At this meeting officers for the coming year are elected and all matters of general business transacted.

The Loyola Alumni Association sponsors the Loyola Alumni Student Loan Fund, the Post-Graduate Bursary, and the Under-Graduate Bursary.

The office of the permanent Secretary is located at Loyola College.

PLACEMENT BUREAU

The Bureau is operated by the University Section of the National Employment Service with a full-time Officer on duty. The recruiting

of university students by employers is a continuous process which starts early in the academic year. Almost all of the major national employers are active in this recruiting, and many of the larger firms send recruiting teams on campus. The major emphasis of the NES Student Placement Service is geared to the placement of graduating and graduate students in employment of a continuing nature. However, assistance in finding summer jobs and part-time employment is given to all students.

COLLEGE BOOK STORE

The Loyola College Book Store has a complete stock of book and materials recommended by the Staff, and a supply of engineering instruments, drawing paper, pens, pencils, note-books, etc. The prices are generally lower than standard retail prices.

STUDENTS EXTRACURRICULAR ACTIVITIES

LOYOLA COLLEGE ATHLETIC ASSOCIATION

The Loyola College Athletic Association was formed to aid the Director of Athletics in the promotion and supervision of all athletics in the College and to create and foster a proper college spirit among the students.

An Athletic Board of Control, composed of Faculty Members, guides the policy and overall direction of the Athletic Program.

The College is a member of the Ottawa — St. Lawrence Intercollegiate Athletic Association and competes with other colleges in the following activities: Football, Soccer, Hockey, Basketball, Tennis, Golf, Skiing, Swimming and Curling.

A regular program of Intramural Athletic Activities is conducted during the year. The aim of this program is to offer athletic competition to those students who do not compete on the intercollegiate level.

NO STUDENT MAY PARTICIPATE WITH AN OUTSIDE ORGANIZATION IN ANY ATHLETIC ACTIVITY WITHOUT THE WRITTEN PERMISSION OF THE L. C. A. A.

DEBATING SOCIETY

The Debating Society has been resting on its laurels, having won

many trophies in the past years. In recent years, however, interest in the Society and the quality of debating have both declined, but this year the executive intends to concentrate on a full-scale revision. This will permit the Society to resume all previous activities.

DRAMA SOCIETY

Drama has been a long-standing tradition at Loyola, and the College's major productions were at one time widely-celebrated events in Montreal. This year the Society is again planning a wide spread of projected activities.

FACULTY SOCIETIES

Arts Society

This is one of the older campus societies. It has, in the past year, presented such projects as a freshman integration program, a committee for the dissemination of literature on post-graduate courses, a series of prominent guest speakers and an annual banquet.

Chemical Institute of Canada

This is an organization for professional chemists, and has student chapters at many Universities across the country. The Loyola chapter, incorporating students from Marianopolis College, now in its fourth year of operation, offers to students an unequalled opportunity to familiarize themselves with the leading people, ideas, and opinions in chemistry. Open to all students in general or honours chemistry, for $2.00 per year, the Institute offers a monthly magazine, chances to attend (free of charge) the monthly meetings of the Montreal Chapter and hear leading chemists discuss their work, and a variety of tours and social events.

Commerce Society

The Commerce Society, two years younger than the faculty it represents, has, right from its inception, been one of the liveliest societies on campus. The Society sponsors tours, the Red Cross blood drive (an annual event for the last decade), a communion breakfast, and an assortment of other activities, aimed at pleasing the Commercemen. Commerce pins, at $1.00 each, will be available throughout the year, to add that distinctive touch to jackets around the campus.

The Investment Club is an organization of special interest within the Commerce Society, though it is open to all who have a yen to play the stock market. Each member is given $10,000 at the beginning of the year, which he is supposed to 'invest'. A nominal fee is charged for 'brokerage' and all transactions are carried out with reference to the listings in the Montreal Star. Prizes are awarded at the end of each year for those who have gained the most money. The purpose of the club is to give members some indication of the fluctuations, risks, and fortunes of the stock business without involving them in losing their shirt, as they might in real investments.

Engineering Institute of Canada

The Engineering Institute of Canada's Loyola Chapter, now entering its second year, boasts over 100 members who enjoy, for $2.00 a year, a monthly magazine, tours, talks, and banquets, all related to engineering. The Institute is a professional organization to which many Canadian engineers belong. Members can be spotted by their distinctive 'slide-rule' tie-bars.

Premedical and Predental Society

The Premedical and Predental Society presents a program similar to that of the other science societies, but slanted, naturally enough, toward the interests of the premedical and predental students (all of whom are automatically members). After several years of limited activity, radical innovations are planned which include tours to mortuaries to see cadavers dissected, the production of a magazine, "Cadduceus", and active dissemination of information regarding medical schools.

Society for the Advancement of Management

SAM is an international organization of businessmen with student chapters at many institutions of higher learning. The Society, in this College, has a strong following among the Commerce students and has achieved some remarkable successes in its programming since it came here three years ago. The Society publishes a magazine, and the student chapter organizes tours of various business establishments, as well as bringing noted men of the business world to the College to address students.

Science Students Association

The SSA, youngest of the three major faculty associations, presents a varied program of events with a scientific bias, the most important being tours of various plants, regular showings of scientific films, and the annual "Science Banquet", held in March. "Eureka"

is the official paper of the Association. It is also hoped that greater liaison with the CIC and EIC chapters and the Premed and Predent Society will produce other projects of interest to all science students. Science pins, attractive additions to any lapel, will be on sale throughout the year at $1.00 apiece.

PUBLICATIONS

Amphora

The *Amphora*, founded in March 1950, to fill a need not met by the Loyola News or Review, is the College's claim to literary fame. Published at the editor's discretion (usually once a year), the magazine is always in need of articles, poems, paintings, stories, etc. in any genre. The only qualifications is that quality is desired and not quantity. The Amphora's pages are open to any student with talent, and for those who prefer the technical side of publishing (proofreading, etc.), there are a few positions available.

Handbook

The Student Directory, a listing of names, addresses, and telephone numbers of all day-students at the College was begun in Fall 1951 under the auspices of the Arts Society. It was then a set of mimeographed sheets. Last year, the name was changed to Handbook; next year it is hoped to produce a Directory and a Handbook, the latter being ready for Freshman registration day, since the Handbook is designed primarily to give Freshmen a concise, and complete guide to the overall activities of Loyola College.

Loyola News

The official student newspaper, the NEWS has developed from a single, mimeographed sheet issued every other week, to its present status as an eight-page, almost weekly (eighteen issues are planned for this year), combining all the advances of modern printing techniques. Published with the intention of disseminating news of student opinion within the College, the NEWS holds an unrivalled position as an arouser of healthy controversy among the students.

The NEWS is permanently understaffed, having plenty of editors, but no-one to do the work. Consequently, all comers are welcomed (since there's much work) with open arms, though some talent at writing, or ability (e.g. typing) is expected.

Loyola Review

A panoramic view of the year's events at Loyola is presented to the students each April in the Loyola Review, a printed and bound volume representing hundreds of man-hours work by the College's most talented writers, photographers, and layout artists. Some new innovations will be tried, in order to make this a really outstanding production. However, it involves an immense amount of work and the editor wants people now, so that he can get up a full head of steam as soon as possible. Any students interested in working on this year's Review are invited to contact the Editor at their convenience.

REQUIREMENTS FOR ADMISSION

Entrance Requirements

To enter First Year the applicant must have a Junior Matriculation Diploma of the Province of Quebec, with eleven subjects and the average required by the course he is to follow. For Honours and Engineering Certificate Courses this average is 70%. For all other courses it is 65%. The subjects required depend on the course he is to follow.

To enter from other places, or from the Province of Quebec with some other Diploma, equivalent standards are required.

To enter Second Year the applicant must have the Senior Matriculation Diploma of the Province of Quebec with ten subjects and an average of 60%. The subjects required depend on the course he is in.

Application

Before registration a student must have made application for admission and been accepted. An Application form may be procured by coming to, or writing to, the Registrar's Office, Loyola College, Montreal 28. *All* information asked for on this form must be supplied as soon as it becomes available. One who has duly applied, and supplied all the information asked for, will be notified by letter whether or not he is accepted.

Students who were at Loyola the previous year must notify the Registrar before the time assigned in the Academic Calendar of:—

(a) Their intention to return.

(b) What course they intend to take.

They must say whether it will be in an Honours or a General Course and in what Continuation Subject. If a student fails to do this by the date assigned in the Academic Calendar he will have to pay $10.00 before being allowed to register.

Registration

Registration takes place on the days and times assigned. These are given in the Academic Calendar at the beginning of this book. A "Late Registration" fee of $5.00 is charged for registering later than the times assigned.

Each one registers in the Department designated by the name of his Continuation Subject.

Once his program or "year's work" has been fully determined and approved by the Registration Official, the student may not change it without written permission of the Head of his Department, a copy of which approval is sent to the Dean's office.

Admission to Advanced Standing

To get a Degree through Loyola a minimum of two years residence is required.

To take a special course, but not as a candidate for a Degree, one may enter at any level provided one is qualified to take the course desired.

REQUIREMENTS FOR ADMISSION

Admission to Honours Courses

To undertake the Second Year of the Honours Course special permission from the Head of the Department must be had.

Application for a Room on the Campus

Application for a room on the Campus is made to the Dean of Men. A deposit of $50.00 against the room fee must accompany the application. It is returned if the Application is cancelled before September 1st.

SPECIAL REQUIREMENTS

Honours Courses

For promotion on over-all average of 65% is required, with 65% in each honours subject and at least 50% in the others. If a student fails to meet these requirements he may be allowed to transfer to the General course.

General Courses

The year's average required in Commerce is 60%, while in each subject the pass mark is 50%. In all other Faculties the required year's average is 50% and the subject pass mark is also 50%.

Engineering Certificate

In "General Science with Engineering" the required mark is 50%. But to qualify for the Engineering Certificate, with or without the B.Sc., the following conditions must be met: A 70% average in Junior Matriculation for admission to First Year, and a pass mark of 60% in each Engineering, Science or Mathematics subject in all years of the course.

Freshman Classes

A Freshman who in the mid-year examinations and tests fails to make a minimum average of 30% will be required to withdraw immediately. If he is repeating Freshman he must make 50% at mid-year or be asked to withdraw.

SCHOLARSHIPS, BURSARIES AND AWARDS

Scholarships

A Scholarship is an award granted annually to a student for academic excellence, and which may be renewed if the student maintains an above-average (70% overall average) academic standing. The fact that the student has been awarded a scholarship will be duly entered in the student's transcript and will be confirmed by a parchment stating these facts.

The Students will not receive any cash, unless otherwise stated, but their tuition fees will be fully or partly paid by the scholarships and the remainder by the students themselves, depending on the value of the scholarship awarded.

Announcements of new and renewed scholarships will be made at least one week prior to Freshman Registration.

All scholarships, new and renewed, will be awarded by the Committee on Scholarships, Bursaries and Awards.

Excepting Freshmen entering Loyola (these students must write competitive examinations — the date on which these are to be written will be announced later), candidates for scholarships must have completed at least one year at Loyola College.

The value of Endowed Scholarships may fluctuate depending upon the current interest rates. The figures given below are based on a five percent (5%) interest rate.

By Closed scholarship is meant that the scholarship is at present held by a student and is renewable if the said student has maintained a 70% overall average.

By Open scholarship is meant that the scholarship will be available to the student who has obtained the highest academic standard in the Faculty and Year specified below, and who does not already hold another scholarship. No student may hold more than one scholarship at any one time.

A. Endowed Scholarships

The Lilly F. Barry Scholarships:

(A) Value: $400. Closed.

(B) Value: $400. Closed.

(C) Value: $400. It is open to students entering second year science.

The Ursula Carling Scholarships: Endowment from the estate the late Mrs. Ursula Carling, interest to be used for scholarships.

(A) Value: $250. It is open to students entering Second year Arts.

(B) Value: $250. It is open to students entering Second year Commerce.

The Cloran Memorial Scholarships.

(A) Value: $80. Closed.

(B) Value: $80. Closed.

The Collins-Heffernan Scholarship. Funds from the Mary Ellen Heffernan Bursary, and from the Nulsen Collins Scholarship. Value: $200. It is open to students entering Fourth year Arts.

The John M. Cuddy Scholarship. Value: $100. Closed.

The Dowling-Moriarty Scholarship. Funds were received from the estates of the late Francis J. Dowling, and of the late Mrs. E. Stowell, widow of John Moriarty. Value: $200. It is open to students entering Fourth year Engineering.

The Mrs. F. J. Duckett Scholarship. From the estate of the late Mrs. F. J. Duckett. Value: $200. It is open to students entering Third year Commerce.

The Friends of Loyola Scholarship. From the funds endowed for the James Corcoran Scholarship, the Rev. William Doherty Scholarship, the Dollard Scholarship, and the Gregory O'Bryan Scholarship, and from funds given by the Students' Penny Scholarship. Value: $200. It is open to students entering Third year Science.

The Arthur Halley Memorial Scholarship. Endowment from P. F. Halley, St. John's, Newfoundland, to found this Scholarship in memory of his son, a graduate of the Pre-Medical class of 1946 —

Magna Cum Laude — who died on the eve of Convocation. Value: $100. It is open to Pre-Medical students entering Fourth year.

The Loyola Sodality Scholarship. Funds are given from the Sodality Scholarship and from the Loyola Scholarship Club Association Bursary. Value: $200. It is open to students entering Third year Engineering.

The Mahoney-Murphy Scholarship. Originally set up as the Mother Ellen Memorial Scholarship, and as the John Walsh Murphy Memorial Scholarship. Value: $200. It is open to students entering Third year Arts.

Kenneth J. McArdle Scholarship. Presented by Mrs. Mary McArdle in memory of her late husband, Kenneth J. McArdle. Reference is given to a student showing a proficiency in Mathematics Not yet available.

The St. Ignatius Parish Scholarship. The money was collected and presented by the St. Ignatius Men's Association. It was originally known as the Coronation Arts Course Scholarship. Value: $100. Closed.

The Sharp-O'Reilly Scholarship. From the Miss Alice M. Sharp Scholarship, and from the Winnifred O'Reilly Memorial Bursary. Value: $200. It is open to students entering Second year Engineering.

The Stanford Memorial Scholarship. Value: $100. Closed.

B. Gifts by the College

Loyola College Scholarships. For Freshmen — by competitive examinations — date for examinations to be announced.

(A) Arts. Value: $350. Open.

(B) Arts. Value: $350. Open.

(C) Science. Value: $400. Open.

(D) Science. Value: $400. Open.

(E) Commerce. Value: $350. Open.

(F) Commerce. Value: $350. Open.

(G) Engineering. Value: $400. Open.

(H) Engineering. Value: $400. Open.

For students entering Second year:

(A) Arts. Value: $350. Closed.

(B) Science. Value: $400. Closed.

(C) Commerce. Value $350. Closed.

(D) Engineering. Value: $400. Closed.

For students entering Third year:

(A) Arts. Value: $350. Closed.
(B) Science. Value: $400. Closed.
(C) Commerce. Value: $350. Closed.
(D) Engineering. Value: $400. Closed.

For students entering Fourth year:

(A) Arts. Value: $350. Closed.
(B) Science. Value: $400. Closed.
(C) Commerce. Value: $350. Closed.
(D) Engineering. Value: $400. Closed.

The Bartlett Memorial Scholarship. Closed.

The Bryan Memorial Scholarship. Closed.

The Doherty Memorial Scholarship. Closed.

The Doherty Memorial Scholarship. Closed.

The Gasson Memorial Scholarship. Closed.

The Jones Memorial Scholarship. Closed.

The McCarthy Memorial Scholarship. Value: $200. It is open to students entering Third year Commerce.

The McMahon Memorial Scholarship. Closed.

The O'Bryan Memorial Scholarship. Closed.

The O'Dowd Memorial Scholarship. Closed.

The Rector's Scholarship. Closed.

C. Annual Gift Scholarships

The funds for these scholarships are presented to the College for administration or to the students by the donors themselves. These scholarships are open or Closed as indicated, provided that the funds are available.

The L. J. A. Amyot Scholarship. Mr. L. J. A. Amyot of Quebec City paid the North American Life Insurance Company to issue a policy to Loyola guaranteeing an annuity of one hundred dollars per annum for thirty years certain. This guarantee runs out in 1964. Value: $100. It is open to students entering Fourth year Science.

The Charles Brown Memorial Scholarship. Value: $50. Closed.

The Mrs. Charles Brown Special Scholarships. (A) Value: $100. Closed. (B) Value: $100. Closed.

The Gutelius Memorial Scholarships. (A) Value: $100. It is open to students entering Fourth year Commerce. (B) Value: $100. It is open to students entering Second year Arts.

The Knights of Columbus Council 284 Scholarship. Value $150. It is open to students entering Second year Science.

The Loyola Alumni Scholarship. Value: $100. Closed.

The Loyola Mothers' Guild Scholarships. (A) Value: $150. Closed. (B) Value: $150. Closed.

The State Council, Knights of Columbus, Province of Quebec Scholarship. Value: $100. It is open to students entering Second year Commerce.

BURSARIES

A Bursary is a sum of money given to a student in order to assist him financially in the continuation of his studies.

A Bursary will take the form of a credit made to a student's account.

Students desiring bursaries will make written application, stating all pertinent information, to: The Chairman Committee on Scholarships, Bursaries and Awards, Loyola College Montreal, 28.

Applications for bursaries must be made:

a) no later than September 17, 1962, for the first semester.
b) no later than December 20, 1962, for the second semester.

Students are also reminded that they may also make application to the Province of Quebec for bursaries. Application forms may be procured from the Dean of Men.

Loyola Alumni Association Under-Graduate Bursaries: Two bursaries valued at $100.00 each are awarded annually to talented and deserving students who have completed at least one year of studies at Loyola College.

Loyola Alumni Association Post-Graduate Bursaries: Two bursaries valued at $200.00 each are awarded annually to deserving and talented members of the current graduating class who have been accepted for post-graduate work at a recognized university. Details available at the Alumni Office.

African Bursary: A bursary of full tuition for one year and renewable over a four year period is awarded by Loyola College to a qualified and deserving student from any Country in Africa. This bursary is awarded to one who intends to aid in his country's development.

Loyola Bursary for the Blind. A Bursary of the value of full tuition for one year and renewable over a four year period will be awarded to a blind student who is qualified to follow regular courses in any faculty.

The Touche, Ross, Bailey and Smart Bursary: "This bursary is in the amount of $200 and will be awarded annually to a student who is completing his third year and will be entering his final year, majoring in accountancy in the Faculty of Commerce, and who intends on graduation to pursue the qualification of Chartered Accountant. The award will be made on the basis of academic record, ability, personality and other suitable characteristics." The student to whom this bursary is awarded will be offered summer employment with the firm on completion of his third year of studies.

Loyola Alumni Student Loan Fund

Students who have previously attended Loyola College for a minimum of one year are eligible for financial assistance up to an amount equal to the current school year fees. The loan is repayable to the Association after graduation and at a low interest rate. Further details are available from the Alumni Office.

Commonwealth Scholarships

Under a Plan drawn up at a conference held in Oxford in 1959, each participating country of the Commonwealth offers a number of scholarships to students of other Commonwealth countries. These scholarships are mainly for graduate study and are tenable in the country making the offer. Awards are normally for two years and cover travelling, tuition fees, other university fees, and a living allowance. For details of the awards offered by the various countries consult the Registrar's office or write to The Canadian Universities Foundation, 77 Metcalfe Street, Ottawa, Ontario.

AWARDS

Governor-General's Medal: presented to the student with the highest overall average in the four years of the Arts Course.

Lieutenant-Governor's Silver Medal: presented to the student with the highest overall average in the four years of Commerce.

The Loyola Medal: donated by the Loyola College C.O.T.C. to the representative Loyola student among the graduates.

Hamilton Watch Awards: To be presented at graduation to the senior candidates for the Bachelor degree who have most successfully combined proficiency in their major fields of study with achievements — either academic, extra-curricular or both, — in Accounting or Mathematics. The awards are two engraved Hamilton electric watches.

Honours Award: Value $25.00 — presented to the highest ranking honours student among the graduates.

The Pre-Medical Award: presented to the highest ranking pre-Medical student among the graduates.

The Society of Chemical Industry Merit Award (Canadian Section): This award will be given to the highest ranking student (minimum 75%) in the final academic year, who has for a major an honours course in Chemistry, Chemistry-Physics or Chemistry-Mathematics, and who has completed the course in the normal number of years.

The merit award will be a gold key bearing the crest of the Society, the name of the winner, his course, the University and the year, as well as a year's subscription to *Chemistry and Industry*.

Theology Award: presented to the student with the highest four-year average in Theology in all faculties.

The William H. Atherton Award: Value $25.00 — presented to the student outstanding for research in Canadian History.

PRIZES

For the highest average in: Freshman Arts; Sophomore Arts; Junior Arts; Freshman Science; Sophomore Honours Science; Junior Honours Science; Sophomore Engineering; Junior Engineering; Freshman Commerce; Sophomore Commerce; Junior Commerce.

For the highest ranking student in: Freshman Arts Latin; Sophomore Arts Latin; Sophomore Arts English; Freshman Science Science, Mathematics; Freshman Commerce Accounting; Sophomore Commerce Accounting.

For all Arts subjects in: Sophomore Science; Sophomore Commerce.

ACADEMIC REGULATIONS

GENERAL REQUIREMENTS

Attendance

Students are expected to attend lectures. No student who is known to have been absent from more than 20 per cent of the lectures in a course which he has failed, will be allowed to write a supplemental examination in that course. The course must be repeated, or, if an elective, an equivalent course taken.

Promotion

A student is promoted if:

(a) He has made the required pass average

(b) He has not failed in more than two full courses, or their equivalent.

If he has failed to make the required pass average (specified below for the different courses) he must repeat the year's work. If he has attained the pass average but failed in more than the equivalent of two full courses he will be asked to withdraw and prepare to write the examinations in theses subjects at a later date, or to remain in school and repeat his year.

To meet the conditions for promotion the student may in the summer repeat subjects failed, and thus qualify for promotion by September.

In repeating a year's work those subjects must be repeated in which the mark obtained was less than 60%. If the subjects to be repeated are not enough for a full year's work the student may choose other subjects but not from those prescribed for his course from the years ahead. The subjects ahead must be taken in their entirety in the years prescribed for them, even if those taken while repeating could in other circumstances be considered equivalent to them.

If a student fails a year he is repeating he must withdraw.

Supplemental Examinations

If a student has written and failed the first regular examination in a subject and is eligible to write a supplemental, he must do so the first time this supplemental is scheduled. If he fails to write it at this time, or if he writes and again fails it, he must repeat the course, or an equivalent if an elective, before re-examination is allowed.

If for some reason the student finds it too difficult to take the first scheduled supplemental examination referred to above he may ask the Dean for permission not to write at that time. This permission will be granted only if the reason is considered sufficiently serious.

Applications for supplemental examinations in August must be made in due time as set down in the Academic Calendar.

If a student wishes to write his supplemental examination somewhere away from the College he must make arrangements for it at some educational institution. He asks a qualified member of that institution to write the Registrar at Loyola that he undertakes to administer the examination and return the papers. The student must pay that institution the fee it charges for its services.

The ordinary fee for a supplemental examination is $5.00. If, however, the student has obtained permission from the Dean to write outside the regular times he must pay $10.00 for that examination.

Class Assignments

If a teacher lays down certain conditions for sitting for the final examination in a course, such as essays, term papers, etc., and makes these conditions known to the class in due time, a student will be barred from writing the final examination unless he fulfills the conditions laid down. The portion of the year's mark assigned by the teacher to tests and such exercises will be made known to the student at the beginning of the year.

Reports

Reports of examination results of all students are sent to their homes at the end of the school year. A mid-year report is also sent for First Year students.

COURSES

Loyola College offers this list of four-year programmes of study leading to:

The Bachelor of Arts Degree (General)[1] with concentration on: Biology-Chemistry[2]; Classics; Economics; English; History; Political Science.

The Honours Bachelor of Arts Degree[3]: Honours Economics; Honours English; Honours History.

The Bachelor of Science Degree (General) with concentration on Biology-Chemistry; Chemistry; Engineering; Mathematics; Physics.

The Honours Bachelor of Science Degree: Honours Chemistry[4]; Honours Mathematics; Honours Physics.

The Bachelor of Commerce Degree (General) with concentration on: Accounting[5]; Business; Economics.

The Honours Bachelor of Commerce Degree: Economics.

The Bachelor of Science Degree with a Certificate[6] in Engineering[7]; Chemical; Civil; Electrical; Engineering Physics; Mechanical; Mining.

Loyola also offers a three-year programme leading to the Certificate in Engineering. Covering all the engineering subjects of the four-year programme it qualifies for the certificate without the Bachelor of Science Degree.

To choose an honours programme the head of the department must be consulted.

1. Obligatory and elective courses from twenty-two as a minimum to twenty-five as a maximum. Five of the electives are from the chosen field of concentration.
2. meets pre-Medical and pre-Dental requirements.
3. begun in Second Year. Sometimes the chosen programme dictates the First Year elective.
4. fulfills the requirements for professional membership in the Chemical Institute of Canada.
5. exempts good students from (a) the Intermediate Examinations of the Institute of Chartered Accountants of the Province of Quebec, (b) three of the five years apprenticehsip required for the C.A. certificate.
6. holders are eligible to enter the second to last year of the course in most Engineering schools.
7. this is the B.Sc. programme with concentration on Engineering but with special requirements for admission and promotion.

†DESCRIPTION OF COURSES AND SUBJECTS

ACCOUNTING

L. M. Bessner.....*(Department Head) Assistant Professor*
R. L. McGraw.....*Assistant Professor*
G. M. Bonder.....*Lecturer*
A. J. Ferrari.....*Lecturer*
P. J. Keenan.....*Lecturer*
L. Levi.....*Lecturer*
J. H. McMahon.....*Lecturer*
S. Sewell.....*Lecturer*
E. Whitehall.....*Lecturer*

101 Full Course. G. Bonder, A. Ferrari, P. J. Keenan, R. L. McGraw, S. W. Sewell

Introduction to Books of Account and Financial Statements: theory of debit and credit; principles of double entry; books of original entry; recording of transactions through the general, sales, and purchase journals; special forms of cash book; controlling accounts; general ledger; accounts receivable and accounts payable ledgers; discounts, interest, prepaid and accrued charges; notes and bills of exchange; cheques, invoices, statements of account, bills of lading and other commercial papers; imprest system of petty cash; depreciation; provision for bad debts and discounts; inward and outward consignments; capital and revenue expenditures; bank reconciliations; voucher register; single entry; preparation of Trading and Profit and Loss Statements and Balance Sheets, single proprietorship; introduction to Work Sheet.

Lectures: 3 hours per week for two terms.

Text: Finney and Miller, *Principles of Accounting—Introductory.* (Prentice-Hall). (Can. Ed.).

202 Full Course. L. Levi, R. L. McGraw

Operating Statements and Balance Sheets with enlargement of Work Sheet Practice introduced in First Year.

Partnerships: Formation, the partnership agreement; classes of partners and of partnerships; rights, duties, and powers of partners; distribution of profits; admission and withdrawal of partners; partnership dissolution; sale of a partnership to a Corporation; default of a partner, goodwill.

Corporations - Legal Aspects: Formation and control; shareholders, directors; meetings; public and private companies; capital stock; limited liability; statutory books; auditors; dissolution. Accounting for Corporation taking over sole proprietor or partnership. Exchange of shares in Corporation for Assets in business selling out.

Manufacturing Accounts and Statements: Factory departments; elements of cost; materials and supplies; work in process and finished goods accounts; periodic and perpetual inventories.

Departmental Accounts: Distribution of charges to departments; comparison of department operations.

Depreciation: Causes of and accounting for depreciation.

*NB: * beside a course means that the course will not be given in 1962-63.*
† The College reserves the right to cancel without notice any course here listed.

Reserves and reserve funds.

Analysis and Interpretation of Financial Statements: Principles of valuation of current and fixed assets and liabilities; comparative balance sheets, ratios re working capital, share valuation, etc.

Single Entry and conversion to double entry.

Bonds and Debentures: Security payment of interest and principal; trust deed; issue and redemption; accounting for bond issue, interest and amortization.

Lectures: 4 hours per week for two terms.

Texts: Smails, *Accounting Principles.* (Ryerson). Finney and Miller, *Principles of Accounting—Intermediate.* (Prentice-Hall). (Can. Ed.).

303 Full Course. J. H. McMahon

Analysis of Balance Sheet: Analysis and interpretation of financial statements; source and application of funds; equity of shares; sundry analyses; comparative ratios.

Branch Accounts: Merchandise charged at cost, intermediate or selling prices; foreign branches; conversion of accounts in foreign currency.

Investigations: Nature and classes of business investigations; methods of approach to an investigation; investigations not involving fraud or loss—prospectus certificate, proposed merger, prospective investor or purchaser, reorganization of capital structure. Investigation involving loss-fraud, fire loss, burglary costs, etc.

Dominion and Provincial Companies' Act: Relative to preparation of financial statements and accounting procedures.

Lectures: 3 hours per week for two terms.

Texts: Finney and Miller, *Principles of Accounting—Intermediate.* (Prentice-Hall). (Can. Ed.), *Dominion and Province of Quebec Companies' Act.*

304 Half Course. E. G. Whitehall

Holding Companies: Consolidated statements; inter-company transactions and accounts—stock and bond holdings; investment accounts; minority interest.

Reorganizations, Mergers and Amalgamations: Rights and privileges of creditors shareholders, plan of reconstruction.

Lectures: 1 hour per week for two terms.

Texts: Karrenbrock and Simons, *Advanced Accounting.* (Southwestern). Smails, *Accounting Principles.* (Ryerson).

305 (Auditing) Full Course. E. G. Whitehall

Classification and scope; internal check; rights duties and responsibility of auditors; fraud and error in accounts; legal regulations—Dominion and Provincial; audit procedure and programmes; audit certificate and reports; audit working papers.

Lectures: 2 hours per week for two terms.

Texts: Stettler, *Auditing Principles.* (Prentice-Hall). Smails, *Auditing.* (Ryerson). *Dominion and Province of Quebec Companies' Act.*

405 Full Course. L. M. Bessner

Cost Accounting: Terms and cost formulae; elements of cost; cost records, cost reports, estimating cost systems; standard costs; job costs; variances, cost ratios; differential and direct costing.

Budgetary Control: Preparation and control of the budget, variable expense budgets.

Executorships: Charge and discharge statements; capital and income; division of an estate; succession duties.

Bankruptcy and Liquidation Accounts: Receivers' accounts; priority of creditors; statement of affairs; deficiency account; realization and liquidation statement.

Income Tax: Individuals; proprietors; partners; corporations; general considerations.

Lectures: 4 hours per week for two terms.

Texts: Matz, Curry and Frank, *Cost Accounting.* (Gage).
Karrenbrock and Simons, *Advanced Accounting.* (Southwestern).
Gilmour, *Income Tax Handbook, 1962-63.*
Estate Tax Act. (Queen's Printer).
Canadian Bankruptcy Act. (Queen's Printer).

406 (Auditing) Half Course. E. G. Whitehall

A continuation of Auditing 305 with emphasis on Auditing problems, including report writing.

Lectures: 1 hour per week for two terms.

Course leading to a B.Com. with a major in Accounting.

First Year: Accounting 101; Economics 102; English 101; French; Mathematics 101; Theology 101.

Second Year: Accounting 202; Business 201; Economics 204; French; Mathematics 202 and 203; Philosophy 202; Theology.

Third Year: Accounting 303 and 304; Auditing 305; Economics 305; English; Philosophy 303; Theology.

Fourth Year: Accounting 405; Auditing 406; Business 301 or 401; Philosophy 404; Economics Group B elective.

Students holding the Bachelor of Commerce degree with a major in Accounting from Loyola College are usually exempted from the Intermediate examinations of the Institute of Chartered Accountants of Quebec. They are also usually exempted from three of the five years of apprenticeship required for the C.A. certificate.

All other graduates of the College who wish to enter the profession of Accounting, but who have not followed the curriculum (as described above) for an Accounting Major, may do so by successfully completing a prescribed course of training which normally consists of three years of Evening Courses in Accounting, with at least two years of service in an approved office.

For additional information, please consult the Chairman of the Accounting Department.

BIOLOGY

Rev. S. Drummond, S.J. ..... *(Department Head) Professor*
J. R. Bider ..... *Lecturer*

101 Fundamental Biology. Full Course. J. R. Bider

A series of lectures and demonstrations designed to acquaint the general student with those fundamental principles of life which are the basis for an understanding of the structure and function of the living body.

Lectures: 2 hours per week for two terms.

202 Invertebrate Zoology. Full Course. S. Drummond, J. R. Bider

(a) Theory. The course begins with a study of scientific methodology and its application to the living sciences. The nature and characteristics of protoplasm are explained and these are correlated with a discussion of the cell as the unit of structure and function. These basic principles are then utilized in a detailed study of the phyla of the invertebrate animals.

Lectures: 2 hours per week for two terms.

Text: Storer and Usinger, *General Zoology*. (McGraw-Hill).

(b) Laboratory. A detailed study of representative animals of the invertebrate phyla. The first part offers intensive exercises in the use of the microscope and the interpretation of microscopic sections. The second half affords training in manual dexterity necessary for precise dissection.

Laboratory: 3 hours per week for two terms.

Text: Storer and Usinger, *General Zoology*. (McGraw-Hill).

304 Vertebrate Zoology Theory. Full Course. S. Drummond

The course opens with a study of the characteristics and classification of the vertebrates. The basic structure of the vertebrate body is outlined. Following this, the important type vertebrates are studied in detail, particular stress being laid on embryological development, structure and function.

Prerequisite: Biology 202a.

Lectures: 2 hours per week for two terms.

Text: Storer and Usinger, *General Zoology* (McGraw-Hill).

305 Vertebrate Zoology Laboratory. Half Course. S. Drummond

The course comprises a detailed study of the structure of amphioxus, dogfish, frog and rabbit. The course is so conducted that, by training in exact dissection, observation and the preparation of carefully executed drawings, the student may be able to trace the main features of organization from the lower to the higher vertebrates.

Prerequisite: Biology 202b.

Laboratory: 6 hours per week for two terms.

Texts: Storer and Usinger, *General Zoology*. (McGraw-Hill).
Craigie-Bensley, *Practical Anatomy of the Rabbit*. (Univ. of Toronto Press).

406 Histology. Half Course. S. Drummond

(a) Theory. An introductory study of the cell, cell division and the general tissues. The course is designed to explain in detail the structure and function of the basic tissues and to introduce the various combinations of these in the special tissues of the adult body.

Lectures: 2 hours per week for one term.

(b) Laboratory. A series of exercises designed to introduce the student to the fundamentals of cytological and histological technique, and to illustrate, by means of prepared slides, mitosis, meiosis, as well as the microscopic characteristics of the basic types of histological tissues.

Laboratory: 3 hours per week for one term.

408 Genetics. Half Course. S. Drummond

(a) Theory. A series of lectures designed to explain the principles of heredity and variation.

Lectures: 2 hours per week for one term.

(b) Laboratory. A selection of experiments to demonstrate the methods and principles of genetics.

Laboratory: 3 hours per week for one term.

Course leading to a B.A. with Biology-Chemistry major.

First Year: English 105, 106; French; Classics 102 or 121; Mathematics 101; Theology 101; One Elective.

Second Year: Biology 202; English; French; Classics 202 or 221; Philosophy 202; Theology.

Third Year: Biology 304 and 305; Chemistry 101, 102; Philosophy 303; Physics 101, 102; Theology.

Fourth Year: Biology 406, 408; Chemistry 211, 212, 221, 222; Philosphy 404.

Course leading to a B.Sc. with a Biology-Chemistry major.

First Year: Chemistry 101, 102; English 101; French; Mathematics 106, 107, 108, 109; Physics 101, 102; Theology 101.

Second Year: Biology 202; Chemistry 211, 212, 221, 222; Philosophy 202; Theology.

Third Year: Biology 304, 305; Chemistry 323, 324; French; Philosophy 303; Theology.

Fourth Year: Biology 406, 408; Chemistry 425; English; Mathematics 202; Philosophy 404; A Social Science (full course).

BUSINESS

201 Commercial Law. Full Course. L. A. Saint-Pierre

Laws of contracts, sales, agency, partnership, company law, and negotiables instruments.

Lectures: 3 hours per week for two terms.

204 Economics of the Firm. Full Course.

This course is substantially the same as Economics 204.

Lectures: 3 hours per week for two terms.

301 Finance. Full Course.

This course will deal with such aspects of financial mangement as financial planning, capital structure, investment management, refinancing, financial control.

Lectures: 3 hours per week for two terms.

401 Marketing. Full Course.

This course will be devoted to such topics as market research, trends in marketing, marketing costs, product policy, pricing, sales organization, sales promotion, legislation affecting marketing.

Lectures: 2 hours per week for two terms.

411 Business Organization. Full Course.

This course will cover a number of topics in business organization and policy; the role of management, determination of objectives, policy-making, internal organization and control, the role of business in society, human relations in business, relations of business with government.

Lectures: 3 hours per week for two terms.

Courses leading to a B.Com. with a Business major.

First Year: Economics 102; Accounting 101; English 101; French; Mathematics 101; Theology 101.

Second Year: Business 201, 204; Accounting 201; French; Mathematics 202, 203; Philosophy 202; Theology.

Third Year: Business 301; Economics 305; English; Philosophy 303; Political Science 201 or 271; Theology.

Fourth Year: Business 401, 411; Philosophy 404; Sociology 101, 102; Economics (one elective from Group B).

CHEMISTRY

Rev. A. Graham, S.J. ..... *(Department Head) Associate Professor*
D. McElcheran ..... *Associate Professor*
K. Ekler ..... *Associate Professor*
T. Nogrady ..... *Assistant Professor*

101 General Chemistry. Full Course. K. Ekler

Foundation in the principles of Chemistry with emphasis on the kinetic and atomic theories, the structural basis of matter, the Periodic Table and elementary solution theory. The principles are applied in describing the more common inorganic substances and reactions. Extensive practice is given in chemical nomenclature, equation writing, and numerical problems.

Lectures: 3 hours per week for two terms.
Texts: Hutchison, *The Elements and their Reactions.* (Saunders, 1959).
Schaum, *Theory and Problems for Students of College Chemistry.*

102 General Chemistry Laboratory. Half Course.

Taken in conjunction with Chemistry 101.
Text: King, *Semimicro Experiments in General Chemistry.* (Prentice-Hall).

211 Inorganic Qualitive Analysis. Full Course. K. Ekler

Nature of solutions, electrolytes, law chemical equilibrium, ionization constants, solubility products, common ion effect, formation and dissolution of precipitates, equilibrium law applied to hydrolysis, amphoterism, complex ions and complex compounds.

Prerequisite: Chemistry 101.
Lectures: 2 hours per week for one term.
Laboratory: 6 hours per week for one term.
Text: Sorum, *Introduction to Semimicro Qualitative Chemical Analysis.* (Prentice-Hall).

212 Elementary Inorganic Quantitive Analysis. Full Course. K. Ekler

Theoretical aspects of precipitations in gravimetric and volumetric analysis, theory of indicators, acid-base titration, oxidation—reduction methods of analysis. Determination of ores by volumteric methods. Theory of precipitation and complex formation analysis.

Lectures: 2 hours per week for one term.
Laboratory: 6 hours per week for one term.
Text: Kolthoff and Sandell, *Quantitative Inorganic Analysis.* (Macmillan).

221 Organic Chemistry Theory. Full Course. A. Graham

Introductory course in nomenclature, type reactions and synthesis of aliphatic, alicyclic and aromatic hydrocarbons and their derivatives. Theoretical aspects including resonance, orbital theory and simpler reaction mechanisms are introduced.

Prerequisite: Chemistry 101.
Lectures: 3 hours per week for two terms.
Text: English and Cassidy, *Principles of Organic Chemistry.* (McGraw-Hill).

222 Organic Chemistry Laboratory. Half Course. A. Graham, T. Nogrady

A systematic preparation of simpler organic compounds; the theory of fundamental techniques such as steam distillation, filtration, the determination of physical constants. To be taken in conjunction with Chemistry 221.

Prerequisite: Chemistry 102.

Laboratory: 3 hours per week for two terms.

Text: Cason and Rapoport, *Laboratory Text in Organic Chemistry.*

230 Half Course.

A study of the properties of gases, liquids and solutions; chemical equilibrium; methods for the determination of hydrogen ion concentration.

Lectures: 1 hour per week for two terms.

231 Introductory Physical Chemistry. Full Course. D. McElcheran

The principles of physical chemistry, based on elementary kinetic theory and thermodynamics. Includes the following topics: the gas state, first and second laws of Thermodynamics, liquid and solid states, solutions, homogeneous and heterogeneous equilibria, reaction kinetics, electrochemical phenomena. Problems form an integral part of the course.

Lectures: 3 hours per week for two terms.

313 Quantitative Inorganic Analysis (Adv.). Full Course. K. Ekler

A study of instrumental analytical methods. Electro-deposition, potentiometry, amperometry, absorption of radiation, gas analysis, ion exchange separations, polarography.

Prerequisite: Chemistry 211, 213.

Lectures: 1 hour per week for one term

Laboratory: 6 hours per week for one term.

Texts: Kolthoff and Laitinen, *pH and Electro Titration.* (Wiley).
Ewing, *Instrumental Methods of Chemical Analysis.* (McGraw-Hill).
Sandell, *Colorimetric Determination of Traces of Metals.* (Interscience).
Reilley and Sawyer, *Experiments for Instrumental Methods.* (McGraw-Hill).

323 Organic Chemistry Theory. Full Course. T. Nogrady

Critical review and extension of aliphatic and aromatic reactions; more intensive study of reaction mechanisms, stereoisomerism, carbohydrates, problems of synthesis and identification.

Prerequisite: Chemistry 221.

Lectures: 2 hours per week for two terms.

Text: Brewster and McEwen, *Organic Chemistry.* 3rd. Ed. (Prentice-Hall).

324 Identification of Organic Compounds. Full Course. A. Graham

Theory and practice of organic qualitative analysis: Most of the laboratory time is given to the identification of unknown compounds and the separation and identification of a simple mixture.

Prerequisite: Chemistry 222.

Lectures: 1 hour per week for two terms.

Laboratory: 3 hours per week for the first term; 6 hours per week for the second term.

Text: McElwain, *The Characterization of Organic Compounds.* (Macmillan).

332 Advanced Physical Chemistry. Full Course. D. McElcheran

Selected topics: includes—structure of solid state, surface phenomena, the colloidal state, phase rule.

Prerequisite: Chemistry 231.

Lectures: 2 hours per week for two terms.

333 Physical Chemistry Laboratory. D. McElcheran

To be taken in conjunction with Chemistry 332.

Laboratory: 4 hours per week (one afternoon) for one term.

Text: Daniels, et al, *Experimental Physical Chemistry.* 5th Ed. (McGraw-Hill).

334 Thermodynamics. Full Course. D. McElcheran

A thorough study of classical thermodynamics. Considerable emphasis placed on physical as well as chemical application.

Prerequisite: Chemistry 231; Math. 205.

Lectures: 2 hours per week for two terms.

425 Organic Chemistry Theory. Full Course. A. Graham, T. Nogrady

Selected topics of organic chemistry, including terpenes, steroids, heterocyclic compounds, polymers and alkaloids. Reaction mechanisms and such stereochemical aspects as confirmational analysis are treated extensively; the biological significance of many compounds is stressed.

Prerequisite: Chemistry 221, 323.

Lectures: 2 hours per week for two terms.

426 Organic Preparation Laboratory. Full Course. A. Graham, T. Nogrady

The student performs a varying series of more difficult preparations and is expected to become proficient in such techniques as vacuum distillation, catalytic hydrogenation and the manipulation of larger scale bench equipment. A sound knowledge of theory is required.

Prerequisite: Chemistry 222, 324.

Laboraotry: 6 hours per week for two terms.

Text: Vogel, *A text-book of Practical Chemistry.* (Longmans).

435 Advanced Physical Chemistry Laboratory. Full Course.
D. McElcheran

A continuation of Chemistry 333, but fewer and more demanding experiments.

Prerequisite: Chemistry 333.

Laboratory: 4 hours per week for two terms.

436 Electrochemistry. Half Course. K. Ekler

Electrolytic conduction and electrolysis: Faraday's laws; specific and equivalent conductance and measurement of conductance; mobility and transport number; theory of strong electrolytes; thermodynamics of cells; electrode potentials; concentration cells; liquid junction potentials; overvoltage and polarization phenomena.

Prerequisite: Chemistry 322, 334.

Lectures: 2 hours per week for one term.

437 Kinetic Theory and Chemical Kinetics. Full Course. D. McElcheran

The classical atomic theory. Kinetic theory of gases; the statistical mechanical approach to the Maxwell-Boltzman Distribution, Collision phenomena. Reaction Kinetics. The rate laws; Classical collision theory; Activated State Theory; Reaction Mechanisms; Free Radical chemistry; Chain processes.

Prerequisite: Chemistry 332, 334.

Lectures: 2 hours per week for two terms.

438 Quantum Chemistry. Half Course. D. McElcheran

The transition from classical to modern physics. Michelson-Morley experiment —Special theory of relativity, Planck's Black Body Radiation, Photoelectric effect, Radioactivity and the fundamental particles, The Rutherford-Bohr-atom, Schrodinger Wave Equation Atomic Spectra, Molecular structure and bonding.

Lectures: 2 hours per week for one term.

Course for a B.Sc. in Honours Chemistry.

First Year: Chemistry 101, 102; English 101; French; Mathematics 106, 107, 108, 109; Physics 101, 102; Theology 101.

Second Year: Chemistry 211, 212, 221, 222, 231; French; Mathematics 205, 206; Philosophy 202; Theology.

Third Year: Chemistry 313, 323, 324, 332, 333, 334; English; Mathematics 309; Philosophy 303; Physics 204, 205; Theology.

Fourth Year: Chemistry 425, 426, 435, 436, 437, 438; Philosophy 404; Physics 421. The Department will make available to selected students a Senior Thesis (450) in Organic or Physical Chemistry to be done in the second term.

Course for a B.Sc. Major in Chemistry.

First Year: This year is the same as in Honours Chemistry.

Second Year: Chemistry 211, 212, 221, 222; French; Mathematics 205, 206; Philosophy 202; Theology.

Third Year: Chemistry 231, 313, 323, 324; English; Philosophy 303; Theology.

Fourth Year: Chemistry 332, 333, 425, 426 and 334 or 437; Philosophy 404.

CLASSICS

Rev. E. Smith, S.J. ..... *(Department Head) Professor*
Mrs. E. Crann ..... *Lecturer*

101 Elementary Latin. Full Course.

A course for students with no previous study in Latin, or with less than what is required for the Junior Matriculation paper in this subject.

Lectures: 3 hours per week for two terms.

102 Latin Translation and Prose Composition. Full Course. E. Smith

(a) Authors: Cicero; Selections from Livy, Caesar and the Roman Poets.

Texts: G. N. Hall, *Pro Archia.* (Macmillan).
L. A. Welding, *Latin Prose for Schools*, Parts 2 and 3. (Faber & Faber).
Breslove, Cameron et al, *Latin Poetry Selections.* (Nelson).

(b) Practice: Training in the syntax of Latin grammar principally for the better comprehension of the authors, but also to develop some facility in Latin prose composition.

(c) Sight translation.

Prerequisite: Junior Matriculation Latin or Classics 101.

Lectures: 3 hours per week for two terms.

111 Elementary Greek. Full Course.

A course for those with no previous training in Greek.

Lectures: 3 hours per week for two terms.

112 Greek Translation and Prose Composition. Full Course. E. E. Cran

Prerequisite: Junior Matriculation Greek or Classics 111.

Lectures: 3 hours per week for two terms.

Text: Freeman and Lowe, *A Greek Reader for Schools.* (Clarendon).

121 Classics in Translation. Full Course. E. E. Cran

The purpose of this course is to introduce students to the literature and history of Greece and Rome. The emphasis is on literature and such other aspects of cultural and political development as are necessary for an understanding of literature and significant for us today. Readings, which are in English, are chosen to illustrate the most typical literary forms of the periods studied, as well as to provide an introduction to some of the most important classical authors.

Texts: Homer, *The Odyssey.*
Herodotus, *Selections.*
Euripides, *Alcestis.*
Plato, *Apology of Socrates*, Crito, *Euthypro.*
Cicero, *Selections.*
Virgil, *The Aeneid.*
Selections from other Roman Authors.

202 Latin Translation and Prose Composition. Full Course. E. Smith

(a) Authors: Cicero—Pro Lege Manilia; Tacitus—Selections from the Agricola and Germania.

Texts: A. S. Wilkins, Cicero: *Pro Lege Manilia.* (Macmillan).
Tacitus: *Agricola and Germania.* (Pitt Press Series).
Catullus: Smith and Melluish. (Allen & Erwin).
Breslove et al., *Latin Poetry Selections.* (Nelson).

(b) Practice: More detailed study of Latin grammatical constructions and practice in writing more advanced Latin prose.

Prerequisite: Classics 102.

Lectures: 3 hours per week for two terms.

Text: P. Robertson, *Latin Prose Composition.* (Macmillan).

212 Greek Translation and Prose Composition. Full Course.

Prerequisite: Classics 112.

Lectures: 3 hours per week for two terms.

221 Classics in Translation. Full Course. E. E. Cran

In this course a more detailed study will be made of some of the more enduringly important types of Classical Literature. The two most characteristic genres of Latin Literature—satire and history—will be studied during the one term and Greek drama during the other.

Texts: Horace, *Selected Satires and Epistles.*
Jurenal, *Selected Satires.*
Livy, *The Early History of Rome.* (selections).
Tacitus, *The Annals.*
Aeschylus, *The Oresteia.*
Sophocles, *The Thehan Plays.*
Euripides, *Hippolytus, Ion, The Trojan Women.*
Aristophanes, *The Frogs, The Clouds, The Birds.*

302 Latin Authors. Full Course.

Prerequisite: Classics 202.

Lectures: 3 hours per week for two terms.

312 Greek Authors. Full Course.

Prerequisite: Classics 212.

Lectures: 3 hours per week for two terms.

330 History of Ancient Greece and Rome. Full Course.

Lectures: 3 hours per week for two terms.

402 Latin Authors. Full Course.

Prerequisite: Classics 202.

Lectures: 3 hours per week for two terms.

412 Greek Authors. Full Course.

Prerequisite: Classics 212.

Lectures: 3 hours per week for two terms.

Course leading to a General B.A. with the major in Classics (Latin).

First Year: Classics 102; English 105, 106; French; Mathematics 101; Theology 101; one elective (preferably Classics 112 or 121).

Second Year: Classics 202 and one from Classics 112, 121, 212, 221; English, French; Philosophy 202; Theology.

Third Year: Classics 302 or 402 and two from Classics 121, 212, 221, 312, 330 430; Philosophy 303; Theology; Science elective.

Fourth Year: Classics 302 or 402 and two from Classics 121, 212, 221, 312, 330 412; Philosophy 404; Sociology 101, 102.

ECONOMICS

F. J. Hayes.....(*Department Head*) *Associate Professor*
A. G. Lallier.....*Assistant Professor*
N. G. Pillai.....*Assistant Professor*
L. Simcoe.....*Lecturer*

102 Principles of Economics. Full Course.

A survey of the existing economic order, with particular emphasis on the salient characteristics of the North American Economy. Concentration is on explaining and evaluating the operation of the price system as it regulates production, distribution, and consumption, and as it in turn is modified and influenced by private organization and government policy. Consideration is also given to the determination of aggregate economic activity. The main areas studied include: the monetary and banking systems in the United States and Canada; the composition and fluctuations of national income; and the major conditions of economic growth; all as influenced by monetary, fiscal, and other policies.

Lectures: 3 hours per week for two terms.

204 Economics of the Firm. Full Course.

In this course consideration will be given to such topics as: theory and measurement of demand; demand forecasts; production functions; cost analysis; price and output policy under various market conditions; factor pricing.

Lectures: 3 hours per week for two terms.

301 Economic History. Full Course. A. G. Lallier

An analysis of the development of Western Europe, Canada, and the United States.

Lectures: 3 hours per week for two terms.

302 Theories and Processes of Economic Growth and Development. Full Course. N. Pillai

A consideration of various contributions by economists and others to an understanding of how societies grow and undergo institutional change. The course also includes a study of the problem of accelerating economic growth, with emphasis on selected developing nations of the present time, an analysis of the process of capital formation, the role of the state (in different politico-economic systems), the role of external assistance in economic development, and the economics of investment decisions. Emphasis is also given to the interaction of cultural change and economic development.

Lectures: 3 hours per week for two terms.

305 Money, Banking, and Income Theory. Full Course. L. Simcoe

The functions of money; money and prices; the evolution and kinds of money; the value of money; the supply of money; monetary and banking developments in Canada, the United States and the United Kingdom; the determinants of national income; the multiplier and acceleration principles; monetary and fiscal policy.

Lectures: 3 hours per week for two terms.

306 Labour Economics. Full Course.

History of the labour movement in Europe, Canada and the U.S.; labour problems; the economics of labour; collective bargaining; case studies; the social teaching of the Church; labour legislation in England, Canada and the United States.

Lectures: 3 hour per week for two terms.

308 (formerly 408a) Applied Statistics. Half Course. F. J. Hayes

The application of statistical methods to economic problems including curve fitting, trend lines, seasonal variation, the measurement of cyclical fluctuations, correlation and index numbers.

Lectures: 3 hours per week for First Term.

310 (formerly 410). History of Economic Thought. Full Course. (Honours).

A critical review of economic thought since Plato and Aristotle.

Lectures: 3 hours per week for two terms.

312 Comparative Economic Systems. Full Course. A. G. Lallier

The evolution of economic systems is discussed and evaluated in terms of modern economic theory, and from the point of view of economic efficiency and development.

Lectures: 3 hours per week for two terms.

313 (formerly 413) Economic Fluctuations. Half Course. F. J. Hayes

Statistical aspects of the business cycle, the Kitchin, Juglar and Kondratieff cycles; monetary, overinvestment, and underconsumption theories of the cycle; Schumpeter's theory; the influence of some strategic factors; an eclectic theory of the cycle; policy.

Lectures: 3 hours per week for Second Term.

317 (formerly 408b) Mathematical Economics. Half Course. (Honours) N. G. Pillai

Application of elementary mathematical techniques to economic analysis. Topics covered will include the Calculus, Theory of Determinants, Linear Programming, etc., and their applications to selected topics in economic theory.

Lectures: 3 hours per week for Second Term.

319 Economic Geography. Full Course.

This course will be devoted to an examination of the influence which geographical factors have had and continue to have on economic activity.

Lectures: 3 hours per week for two terms.

407 (formerly 307) International Trade. Full Course. A. J. Lallier

Historical and economic background of international trade; the theory of international trade; balance of payments; international capital movements; foreign exchange; international commercial policies; internatioal organizations dealing with commercial policy.

Lectures: 3 hours per week for two terms.

411 Advanced Economic Analysis. Full Course. (Honours). F. J. Hayes

(a) Micro-Economics: A detailed and critical study of selected topics in Demand Theory, Theory of the Firm, and Distribution Theory.

(b) Macro-Economics: A critical study of selected topics in Aggregative Economic Analysis.

Lectures: 3 hours per week for two terms.

415 Public Finance. Half Course. L. Simcoe

A study of the principles and practices of public finance, with special reference to Canada.

Lectures: 3 hours per week for First Term.

416 Economic Policy. Half Course. L. Simcoe

This course will be devoted to an examination of economic policy in such areas as business, agriculture, commerce, income redistribution, transportation, social security.

Lectures: 3 hours per week for Second Term.

418 Industrial Relations. Half Course. N. G. Pillai

An introduction to the problems of Personnel Administration and employer-employee relations in modern industry. Topics covered will include: the development of industrial bureaucracy and labour organizations, job evaluation, time study, performance appraisal, wage and non-wage incentives, and the sociology of industrial relations. The course will conclude with a consideration of the role of the state and public interest in industrial relations.

Lectures: 3 hours per week for First Term.

Group A Electives: Economics 301, 302, 312, 319.

Group B Electives: Economics 306, 407, 415 and 416, 415 and 313, 418 and 416, 418 and 313.

Courses leading to a B.A. with a major in Economics.

First Year: Economics 102; English 105, 106; French; Classics 102 or 121; Theology 101; Mathematics 101.

Second Year: Economics 204; English; French; Classics 202 or 221; Philosophy 202; Theology.

Third Year: Economics 305, 308; History; Mathematics 202; Philosophy 303; Theology; Philosophy elective (half course).

Fourth Year: Economics (one elective from Group A), (one elective from Group B); Philosophy 404; Sociology 101, 102; Philosophy elective (half course).

Courses leading to a B.Com. with a major in Economics.

First Year: Economics 102; Accounting 101; English 101; French; Mathematics 101; Theology 101.

Second Year: Economics 204; Accounting 202; Business 201; French; Mathematics 202, 203; Philosophy 202; Theology.

Third Year: Economics 305, 308, 313 or 416; English; Philosophy 303; Theology; Political Science 201 or 271.

Fourth Year: Economics (one elective from Group A), (one elective from Group B); Business 301 or 401; Philosophy 404; Sociology 101, 102.

Courses leading to an Honours B.A. in Economics.

First Year: Economics 102; English 105, 106; Classics 102 or 121; Mathematics 101; Thoelogy 101; French.

Second Year: Economics 204; French; Classics 202 or 221; Philosophy 202; Mathematics 202, 204; Theology.

Third Year: Economics 305, 310, 308, 317; Philosophy 303; Theology; English.

Fourth Year: Economics 411, (one elective from Group A), (one elective from Group B); Philosophy 404; Political Science 201 or 271.

Courses leading to an Honours B.Com. in Economics.

First Year: Economics 102; Accounting 101; English 101; French; Mathematics 101; Theology 101.

Second Year: Economics 204; Accounting 202; Business 201; French; Mathematics 202, 204; Philosophy 202; Theology.

Third Year: Economics 305, 310, 308, 317; English; Philosophy 303; Theology.

Fourth Year: Economics 411, (one elective from Group A), (one elective from Group B); Philosophy 404; Sociology 101, 102.

ENGINEERING

F. Guadagni.....*Associate Professor*
D. J. McDougall.....(*acting Head of Department*) *Associate Professor*
D. Hudson.....*Assistant Professor*
S. Yalcin.....*Assistant Professor*
H. J. Bergmann.....*Lecturer*
Rev. H. Wardell, S.J.....*Instructor*

100 Engineering Mathematics. Half Course. F. Guadagni

This course is designed for first year engineering students who have a credit in Intermediate Trigonometry. It consists primarily of problems based on the logarithmic solutions of oblique triangles both in one plane and in more than one plane. It also includes general values, inverse functions, properties of triangles and polygons.

Lectures: 1 hour per week for two terms.

101 Engineering Mathematics. Half Course. F. Guadagni

This is the second term course and is designed for those engineering students who have taken trigonometry in the first term. This course stresses logarithims and problems based on the solution of oblique triangles in one plane only.

Lectures: 1 hour per week for Second Term.

120 Elements of Mechanical Drawing. Full Course. H. Wardell

Selection and use of drafting instruments and materials; lettering, conventional practices and symbols, sectional views and methods of reproduction; orthographic projection auxiliary and oblique views, dimensioning, sectioning.

Laboratory: 3 hours per week for two terms.

Text: French, *Engineering Drawing.* (McGraw-Hill).

160 Elements of Engineering Practice. Staff

A series of lectures designed to acquaint the First Year students with the basic concepts, practice and history of Engineering.

200 Engineering Mathematics. Half Course. F. Guadagni

The slide rule, its use and limitations. Problems primarily designed to afford practice in the use of the slide rule.

Lectures: 1 hour per week for Second Term.

210 Statics and Dynamics. Full Course. F. Guadagni

Equilibrium of concurrent and non-concurrent forces; simple beams and framework with stress analysis by the methods of sections. Elementary dynamics of

particles; rectilinear motion; projectiles; the inclined plane and pulleys; impulse, impact and momentum of streams of particles; work energy; centre of gravity; friction.

Lectures: 2 hours per week for two terms.

Text: *Mimeographed problems.*

Reference Books: Higdon and Stiles, *Engineering Mechanics.* (Prentice-Hall).
Timoshenko and Young, *Engineering Mechanics.* (McGraw-Hill).

220 Mechanical Drawing. Full Course. H. Wardell

Geometrical construction of ellipses, hyperbolas, cycloids, involutes, etc. Pictorial drawings including isometric, oblique, common machines elements: screws, welding, piping, gears, pulleys and structural shapes; free-hand sketching, work and assembly drawings.

One hour lecture, two hours Lab. per week for two terms.

Text: French, *Engineering Drawing.* (McGraw-Hill).

221 Descriptive Geometry. Half Course. F. Guadagni

Theory of orthographic projection, planes and their traces, oblique planes solution dihedral angles and practical mining problems involving principles covered in the course.

One hour lecture, two hours Lab. per week for two terms.

Text: *Mimeographed notes.*

222 Graphical Statics. Half Course. F. Guadagni

Lectures: 1 hour per week for Second Term.

230 Elements of Surveying. Half Course. S. Yalcin

Kinds of surveying operations: the chain, the tape and their use. The engineer's level; differential and profile leveling. The engineer's compass, its use; local attraction in magnetic surveys. The transit and transit traverses; stadia: circular curves; calculation of areas by the method of total coordinates.

Lectures: 2 hours per week for Second Term.

Reference Books: Davis and Foote, *Surveying.* (McGraw-Hill).
Breed, *Surveying.* (Wiley).

240 Elements of Engineering Materials. Half Course. S. Yalcin

Fundamental structure, properties and physical behavior of materials. Stability use and control of properties. Alloy theory and metallic phases. Production, properties, uses and protection of ferrous and non-ferrous metals and alloys. Effects of hot and cold working. Properties of non-metallic materials: wood, cementing materials, concrete, soils, plastics, rubber, fuels.

Lectures: 1 hour per week for two terms.

Text: Bacha, Schwalje, Del Mastro, *Elements of Engineering Materials.* (Harper).

260 Engineering reports. Half Course.

This is English 2-54.

300 Engineering Mathematics. Half Course. F. Guadagni

A selection of exercises and problems requiring analysis and the application of accepted or derived methods of solution.

Lectures: 1 hour per week for two terms.

Laboratory: 2 hours per week for two terms.

Text: *Mimeographed problems.*

301 Engineering Mathematics. Full Course. F. Guadagni

Application of physical and chemical principles to some fundamental problems in Chemical Engineering.

Lectures: 1 hour per week for two terms.

310 Mechanics. Full Course. F. Guadagni

Shearing force and bending moments; kinematics, dynamics and statics of systems of particle and of rigid bodies. Variable rectilinear and curvilinear motion. Simple harmonic motion; moments of inertia and translation and rotation of rigid bodies. Impact. Conservation of angular momentum. Gyroscopes.

Lectures: 3 hours per week for two terms.

Text: *Mimeographed problems.*

Reference Books: Higdon and Stiles, *Engineering Mechanics.* (Prentice-Hall).
Timoshenko and Young, *Engineering Mechanics.* (McGraw-Hill).

311 Mechanics. Full Course. F. Guadagni

Shearing force and bending moment. Kinematics, dynamics and statics of systems of particles and of rigid bodies. Variable rectilinear and curvilinear motion. Simple harmonic motion. Moments of inertia and center of pressure. Engineering 311 and 410 are together equivalent to Engineering 310.

Lectures: 2 hours per week for two terms.

Text: *Mimeographed problems.*

Reference Books: See Eng. 310.

312 Mechanics of Machines. Half Course. F. Guadagni

Constrained motion; instant centers; centrodes; analysis and classification of simple mechanisms, including the quadric-crank, the slider-crank and wheel trains; design of involute gear teeth; belts and flexible couplings; cam design.

Lectures: 2 hours per week for Second Term.

Laboratory: 2 hours per week for Second Term.

320 Machine Drawing. Half Course. H. Wardell

Engineering drafting room procedure and technique in the production of working drawings of machinery, correlation between processes and design.

Laboratory: 3 hours per week for First Term.

Text: French, *Engineering Drawing.* (McGraw-Hill).

321 Structural Drawing. Half Course. S. Yalcin

Introduction to layout and detail drawings for structures in steel, timber and reinforced concrete.

Laboratory: 3 hours per week for Second Term.

Text: French, *Engineering Drawing.* (McGraw-Hill).

330 Surveying. Half Course. S. Yalcin

Adjustment of level and transit; theory and use of the polar planimeter; double meridian distance method of calculating areas; omitted measurements and partition of land; cross section and borrow pits; circular curves and spirals; vertical curves.

Lectures: 2 hours per week for First Term.

Reference Books: Davis and Foote, *Surveying.* (McGraw-Hill).
Breed, *Surveying.* (Wiley).

331 Surveying Problems. Half Course. S. Yalcin

Earthworks calculations using the polar planimeter.

Laboratory: 3 hours per week for First Term.

332 Elementary Surveying Field Work.

Practice in chaining and taping; use of the level and of the transit; complete survey of a tract of land.

Summer School: Four weeks in April and May, after Engineering 230.

340 Engineering Materials (Physical Metallurgy). Half Course. H. J. Bergmann

Review of ferrous and non-ferrous metallurgy; Theory and practice of heat treatment and deformation of metals; use of furnaces and testing equipment; macroscopic and microscopic inspection.

Lectures: 1 hour per week for First Term.

Laboratory: 3 hours per week for First Term.

Text: Rollason, *Metallurgy for Engineers.* (Edward Arnold).

341 Strength of Materials. Full Course. D. Hudson

Elastic theory of matter; axial, thermal and bending stresses; combined stress; tension; deflection of beams by differential equation of elastic line, moment area, superposition and conjugate beam methods; statically indeterminate beams; energy of strain; introduction to photostress analysis and theory of models.

Lectures: 2 hours per week for two terms.

Laboratory: 3 hours per week for Second Term.

Reference Book: Timoshenko and Young, *Elements of Strength of Materials.* (Van Nostrand).

342 Mechanical Engineering. Full Course.

Thermodynamics of mechanical engineering processes; steam power; I-C engines; compressors; fundamentals of refrigeration and psychrometrics; heat transfer; fluid mechanics.

Lectures: 2 hours per week for two terms.

Reference Books: Ebaugh, *Engineering Thermodynamics.* (Van Nostrand). Severn, Miles and Degler, *Steam, Air and Gas Power.* (Wiley).

343 Mechanical Engineering Laboratory. Half Course.

Measurement of technical performance of machines: boilers; I-C engines; steam engines; gas and steam turbines; compressors; fans; fuel analysis; heat transfer.

Laboratory: 3 hours per week for two terms.

344 Circuit Analysis. Full Course. D. Hudson

The fundamentals of the analysis of linear circuits to steady, time varying, periodic and non-periodic circuits and voltages; general analysis, network theorms, active network analysis, time frequency domain relationships, polyphase circuits, Fourier series, Laplace transforms.

Lectures: 2 hours per week for two terms.

Laboratory: 3 hours per week for Second Term.

Reference Book: Walsh and Millar, *Electric Circuits.* (McGraw-Hill).

345 Circuit Analysis. Half Course. D. Hudson

Modified form of Engineering 344, given in one term.

Lectures: 2 hours per week for Second Term.

Laboratory: 3 hours per week for Second Term.

Reference Book: Walsh and Millar, *Electric Circuits.* (McGraw-Hill).

360 Technical Report.

Students entering the final year of the Engineering course must submit a technical report. The most suitable subject for the report is a topic drawn from the experience of the student during his summer work, but a similar topic connected with any engineering, scientific or industrial work with which he is familiar is acceptable. The report should be approximately 2,000 words in length and must be handed in not later than October 3rd.

361 Engineering Practice. Half Course.

410 Mechanics. Half Course. F. Guadagni

Translation and rotation of rigid bodies. Impact. Conservation of angular momentum; Gyroscopes. Engineering 311 and 410 are together equivalent to Engineering 310.

Lectures: 2 hours per week for First Term.

Text: *Mimeographed problems.*

Reference Books: see Eng. 310.

430 Surveying Field School (McGill Engineering 377).

Preliminary railway or highway survey with transit, profile and topographic parties; plane table, hand level and stadia; spiral curves; cross sections; simple triangulation networks; reciprocal levelling; soundings; current meter surveys; introduction to mine surveying; small geological survey with Brunton compass and chain; astronomical observations.

Summer School: Four weeks in April and May for students proceeding to the fourth year of Civil Engineering at McGill. Mining and Geophysical Engineering students take the first two weeks of this course.

440 Mechanical Engineering Summer School.

A course in Mechanical Drawing and Machine Shop work taken at McGill by students proceeding to the fourth year of Mechanical Engineering at McGill.

Summer School: Four weeks in September following graduation.

Special Regulations for Engineering.

For students entering the first year of Engineering, the Junior matriculation transcript must include English, French, Elementary Algebra, and one of the following: Physics, Chemistry or Trigonometry. An average of at least 70% is required with high standing in mathematics and science subjects. Those students entering with Intermediate Algebra will take Engineering Mathematics 101 in place of Mathematics 108.

For students entering the second year with Senior matriculation, the transcript must include a total of ten papers including English, French, Physics, Chemistry, Senior Algebra, Analytical Geometry and Trigonometry (if not already a constituent subject of the Junior certificate). Above-average marks in Mathematics and Science subjects are required. Students entering at the second-year level will be expected to take Engineering 120 and 220 concurrently.

The College offers a four-year course leading to a B.Sc. with an Engineering Certificate and a three-year non-degree course leading to the Engineering Certificate. Holders of the Certificate in Engineering are eligible to enter the second to last year of the B.Eng. program at McGill University and a number of other Canadian Universities. Options are offered in the following branches of Engineering: Chemical Engineering, Civil Engineering, Electrical Engineering, Engineering Physics, Mechanical Engineering and Mining and Geophysical Engineering. The Freshman year is common to all Engineering students. At the start of the Sophomore year the student will elect to follow either the four-year or three-year program and at the start of the Junior year the student will elect to follow the option in the branch of Engineering of his choice.

Students registered in the three-year program may be permitted to transfer to the four-year program at the start of the Junior year but cannot transfer at the start of the Senior year until they have completed all the prerequisites for the fourth year of the four-year course.

Candidates for the Engineering Certificate must have 60% in each Engineering and Science subject and at least 50% in the others. Any student registered in the final year of either the four-year or three-year program who has a deficiency in the requirements for the Engineering Certificate must make up this deficiency at the first session of supplemental examinations following the end of their final term; otherwise the certificate cannot be granted.

First Year Engineering:

Common Courses:

Engineering: Engineering 100 (or 101), 120, 160.
Science: Chemistry 101, 102; Mathematics 106, 107, 108, 109; Physics 101, 102.
Humanities: English 101; French; Theology 101.

Second Year Engineering:

Common Courses:

Engineering: Engineering 200, 210, 221, 222.
Science: Chemistry 231; Mathematics 205, 206; Physics 201, 202, 303a.
Humanities: Theology.

B.Sc. with Certificate Option:

Humanities: Philosophy 202.

Three-Year Certificate Option:

Engineering: Engineering 220, 230, 240, 332 (Field School).
Science: Mathematics 307.
Humanities: Philosophy 201.

Third Year Engineering—B.Sc. with Certificate Option:

Common Courses:

Engineering: Engineering 220, 230, 240, 311, 332 (Field School).
Science: Geotechnical Science 301 (except Chem. and Eng. Phys.); Mathematics 307; Physics 205, 303b, 304.
Humanities: French (except Eng. Phys.); Philosophy 303; Theology.

Chemical Engineering and Mining and Geophysical Engineering Options:

Science: Chemistry 211, 212.

Engineering Physics Option:

Science: Mathematics 208, 309.

Third Year Engineering—Three Year Certificate Option:

Common Courses:

Engineering: Engineering 260, 310, 360.
Science: Geotechnical Science 301 (except Chem., Mech, Eng. Phy.); Mathematics 308 (except Eng. Phy.), 309; Physics 205, 303b, 304.
Humanities: Theology.

Chemical Engineering Option:

Engineering: Engineering 301, 340, 345.
Science: Chemistry 211, 212, 221, 222; Physics 302.

Civil Engineering Option:

Engineering: Engineering 312, 330, 331, 340, 341, 345, 440 (Field School).

Electrical Engineering Option:

Engineering: Engineering 342, 343, 344.
Science: Physics 402.

Engineering Physics Option:

Engineering: Engineering 344, 361.
Science: Mathematics 305, 311; Physics 310, 401, 402.

Mechanical Engineering Option:

Engineering: Engineering 300, 312, 320, 340, 341, 345, 440 (Summer School).

Mining and Geophysical Engineering Option:

Engineering: Engineering 330, 345, 430 (Field School—1st Half).
Science: Chemistry 211, 212; Geotechnical Science 302, 303, 304 (Field School).

Fourth Year Engineering—B.Sc. with Certificate Option:

Common Courses:

Engineering: Engineering 260, 360, 410.
Science: Mathematics 308 (except Eng. Phy.).
Humanities: English; Philosophy 404; Theology.

Chemical Engineering Option:

Engineering: Engineering 301, 340, 341 (optional), 345.
Science: Chemistry 221, 222, 313; Physics 302.

Civil Engineering Option:

Engineering: Engineering 312, 330, 331, 340, 341, 345, 440 (Field School).
Science: Geotechnical Science 401, 402; Mathematics 309.

Electrical Engineering Option:

Engineering: Engineering 341 (optional), 342, 343, 344.
Science: Physics 402.

Engineering Physics Option:

Engineering: Engineering, 344, 361.
Science: Mathematics 305, 311; Physics 310, 401, 402.

Mechanical Engineering Option:

Engineering: Engineering 300, 312, 320, 340, 341, 345, 440 (Summer School).
Science: Mathematics 309.

Mining and Geophysical Engineering Option:

Engineering: Engineering 330, 340, 341 (optional), 345, 430 (Field School—1st Half.
Science: Geotechnical Science 302, 303, 304 (Field School), 401, 402 (or option in Geotech. Sc.).

ENGLISH

A. G. Hooper ..... *Professor*
Rev. G. MacGuigan ..... (*Department Head*) *Associate Professor*
J. Buell ..... *Associate Professor*
M. Blanar ..... *Assistant Professor*
N. N. Feltes ..... *Assistant Professor*
R. Wareham ..... *Assistant Professor*
K. Young ..... *Assistant Professor*
P. Lanthier ..... *Lecturer*

101 First Year. Full Course. M. Blanar, P. Lanthier

English literature from the beginnings to the 17th century. Four written assignments.

Lectures: 3 hours per week for two terms.
Texts: Selected paperbacks.

105 First Year. Half Course. G. MacGuigan

Logic and Language: A course for first year Arts students designed to reveal the fundamentals of prose style and secure clarity of thought and expression. It includes the levels of English usage, the levels of meaning, feeling and thinking, the techniques of analysis and inquiry, and the syllogistic reasoning of formal. logic.

Lectures: 2 hours per week for two terms.
Texts: Beardsley: *Practical Logic.*
Strunk-White: *The Elements of Style.*
Robertson: *Errors in Composition.*
Borden: *Speaking as the Listener Likes It.*

106 First Year. Half Course. G. MacGuigan

Introduction to Literature (Arts Students): Reading and discussion of the following books:

Newman: *The Uses of Knowledge*....ed. Ward (from *The Idea*).
Ruskin: *As Literary Critic*.....ed. Ball.
Mill: *Autobiography.*
Wordsworth: *The Prelude.*
Woodham-Smith: *Florence Nightingale.*
Cobbett: *Rural Rides* (selections).
Wilde: *The Critic as Artist.*
Wilde: *The Soul of Man under Socialism.*
Wilde: *The Picture of Dorian Gray.*
Eliot: *Adam Bede.*
Shaw: *Saint Joan.*
The Nineteenth Century (Selections) ed. Goodwin.

Lectures: 2 hours per week for two terms.

AUTHOR COURSES

4-11 Chaucer. Half Course. A. G. Hooper

An elective course for honours students.

Prerequisite: 4-43.
Lectures: 3 hours per week for one term.

3-12 Spenser. Full Course. R. Wareham

An obligatory course for fourth year honours students.

Lectures: 3 hours per week for two terms.

3-13 Shakespeare. Full Course. A. G. Hooper

An obligatory course for second year honours students. The comedies, tragedies and historical plays of Shakespeare, with due attention given to his times, his development, and the body of Shakespearean criticism.

Lectures: 3 hours per week for two terms.

3-14 Milton. Full Course. A. G. Hooper

An obligatory course for third year honours students.

Lectures: 3 hours per week for two terms.

3-15 Dryden and Pope. Half Course. M. Blanar

An obligatory course for fourth year honours students. Taken in conjunction with course 3-23.

Lectures: 3 hours per week for one term.

4-16 Swift and Johnson. Full Course. M. Blanar

An elective course for honours students.

Lectures: 3 hours per week for two terms.

PERIOD COURSES

4-21 The Literature of Christendom. Half Course. R. Wareham

An elective course for second year honours students. Taken in conjunction with course 4-33.

Lectures: 3 hours per week for one term.

2-22 Medieval and Renaissance Literature. Full Course. A. G. Hooper

A course for general arts students.

Lectures: 3 hours per week for two terms.

3-23 Restoration and Early 18th-Century Literature. Half Course. M. Blanar

An obligatory course for fourth year honours students. Taken in conjunction with course 3-15.

Lectures: 3 hours per week for one term.

2-24 Restoration and 18th-Century Literature. Full Course. M. Blanar

A course for general Arts students and Third Year Commerce Students.

Lectures: 3 hours per week for two terms.

3-25 Nineteenth-Century Poetry. Full Course. N. N. Feltes

An obligatory course for third year honours students.

Lectures: 3 hours per week for two terms.

4-26 Nineteenth-Century Thought. Full Course. N. N. Feltes

An elective course for honours students. A critical study of key political, moral, spiritual and literary concepts in selected works of Jane Austen, Wordsworth, Mill, Newman, Arnold, George Eliot and others.

Lectures: 3 hours per week for two terms.

2-27 Nineteenth-Century Literature. Full Course. N. N. Feltes

A course for general Arts students and Third Year Science students.

Lectures: 3 hours per week for two terms.

4-28 Modern Literature. Full Course. K. Young

An elective course for honours students.

Lectures: 3 hours per week for two terms.

2-29 Modern Literature. Full Course. K. Young

An elective course for general Arts students.

Lectures: 3 hours per week for two terms.

GENERAL COURSES

2-31 The Epic. Full Course. R. Wareham

A course for general Arts students.

Lectures: 3 hours per week for two terms.

2-32 Drama in the Western World. Full Course. J. Buell

A course for general Arts students.

Lectures: 3 hours per week for two terms.

4-33 Medieval and Tudor Drama. Half Course. J. Buell

An elective course for honours students. Taken in conjunction with course 4-21.

Lectures: 3 hours per week for one term.

4-34 The Novel. Full Course. J. Buell

An elective course for honours students.

Lectures: 3 hours per week for two terms.

2-35 Modern Fictional Forms. Full Course. J. Buell

A course for general Arts students and third year Commerce students.

Lectures: 3 hours per week for two terms.

3-36 Poetry. Full Course. K. Young

An obligatory course for second year honours students.

Lectures: 3 hours per week for two terms.

2-37 The Literature of Ideas. Full Course. R. Wareham

A course for general Arts students.

Lectures: 3 hours per week for two terms.

2-38 Literary Genres. Full Course. R. Wareham

A course for general Arts students.

Lectures: 3 hours per week for two terms.

LANGUAGE COURSES

4-41 The English Language. Half Course. A. G. Hooper

An elective course for honours students.

Lectures: 2 hours per week for one term.

4-42 Anglo-Saxon Language and Literature. Half Course. A. G. Hooper

An elective course for honours students.

Lectures: 2 hours per week for two terms.

4-43 Middle English Language. Half Course. A. G. Hooper

An elective course for honours students. Taken in conjunction with course 4-11

Lectures: 3 hours per week for one term.

4-44 Advanced Prose Composition. Full Course. G. MacGuigan

An elective course for honours students; a theoretical and practical study of prose style to make the student familiar with and competent in the use of the main prose traditions. A reading of treatises on style from Aristotle and Longinus to the present time is required.

Lectures: 3 hours per week for two terms.

Texts: (some) Aristotle: *Rhetoric.*
Weaver: *The Ethics of Rhetoric.*
Auerbach: *Mimesis.*
Whately: *Elements of Rhetoric.*
Donnelly: *Persuasive Speech.*
Read: *English Prose Style.*
Whitehall: *Structural Elements of English.*

2-54 Report Writing. G. MacGuigan, D. J. McDougall

A course for second year Science and Engineering students.

Lectures: 2 hours per week for two terms.

THEORY COURSES

2-51 Principles and Practice of Literature. Full Course. J. Buell.

A course for all general Arts students of second year designed to acquaint the student with the nature of Literature, its various genres, its levels, and basic critical positions and problems.

Lectures: 3 hours per week for two terms.

Texts: (some) Aristotle: *Poetics.*
Blair and Gerber: *Better Reading*, vol. 2.
Daiches: *Critical Approaches to Literature.*

4-53 Criticism. Full Course. J. Buell.

An obligatory course for fourth year honours students. A study of the major theories of literature from Aristotle to the present. The course presumes wide reading in literature and some familiarity with the history of philosophy.

Lectures: 3 hours per week for two terms.

Texts: (some) Bates: *Criticism: The Major Texts.*
Frye: *The Anatomy of Criticism.*
Lonergan: *Insight.*

NATION COURSES

4-61 Canadian Literature. Half Course.

An elective course for honours students.

Lectures: 3 hours per week for one term.

4-62 American Literature. Half Course.

An elective course for honours students.

Lectures: 3 hours per week for one term.

The number code:

The last two digits indicate the character of the course.

The first digit indicates for whom it is given as follows:

2 indicates it is for all General Degree students.

3 indicates it is obligatory for English Honours Degree students.

4 indicates it is an elective for English Honours Degree students.

Course leading to an Honours B.A. in English.

First Year: English 105, 106; French; Mathematics 101; Classics 102 or 121 Theology 101; History 101.

Second Year: English 3-13, 3-36; French; Classics 202 or 221; Philosophy 202; Theology.

Third Year: English 3-14, 3-25; one English elective; Philosophy 303; Theology.

Fourth Year: English 3-12, 3-15, 3-23; one English elective; Philosophy 404; one Philosophy half-course elective.

To qualify for the Honours English B.A., honours standing must be maintained in the six obligatory English courses, in the two English elective courses and in two of the following: Classics 201, Philosophy 202, Philosophy 303 and the Philosophy half-course elective. In other subjects the required pass standing must be maintained.

Course leading to a General B.A. with the Major in English.

First Year: As in the Honours course in English.

Second Year: Classics 202 or 221; English 2-51; French; Philosophy 202; Theology; one elective.

Third Year: Two General Course English electives; Philosophy 303; one Philosophy elective; one Science elective; Theology.

Fourth Year: Two other General Course English electives; Philosophy 404; one Philosophy elective; Sociology 101, 102.

GEOTECHNICAL SCIENCES

D. J. McDougall.....(*Department Head*) *Associate Professor*
S. Yalcin.....*Assistant Professor*
H. J. Bergmann.....*Lecturer*

†301 General Geology. Full Course. S. Yalcin, D. J. McDougall

Elements of mineralogy, petrology, soil mechanics, structural geology, historical geology and geomorphology. Emphasis is laid on the relationship of geology to engineering practice. Mineral, rock and soil specimens, topographic and geologic, maps, and air photos are studied in the laboratory. During October and November several field trips are made to points of interest in and near Montreal.

Lectures: 2 hours per week for two terms.
Laboratory: 2 hours per week for two terms.
Text: Trefethen: *Geology for Engineers*, 2nd ed. (Van Nostrand).

†302 Mineralogy. Full Course. D. J. McDougall

Crystallography, physical mineralogy, chemical mineralogy and the descriptive, mineralogy of some 150 important rock-forming and economic minerals. Occurance, association and uses of minerals. In the laboratory, crystal forms are studied and minerals are identified by the determination of their physical characteristics and by semi-qualitative chemical tests.

Lectures: 2 hours per week for two terms.
Laboratory: 3 hours per week for two terms.
Text: Berry and Mason: *Mineralogy* (Freeman).

†303 Applied Geophysics. Half Course. H. J. Bergmann

An introduction to geophysical methods of prospecting and of investigating subsurface structures. The theories, uses and limitations of various magnetic, electrical, gravitational and seismic methods are explained and compared. The practical operation of the instruments is reviewed and actual field results are obtained and analysed.

Prerequisite: Geotechnical Science 301 and Physics 303a, 330b.
Lectures: 2 hours per week for one term.
Texts: Eve and Keys: *Applied Geophysics*. (Cambridge Univer. Press).
Dobrin: *Introduction to Geophysical Prospecting*. (McGraw-Hill).

†304 Field Geophysics. Half Course.

Field work involving small scale seismic, magnetic, gravimetric and electrical surveys.

Prerequisite: Geotechnical Science 303.
Field Work: 2 weeks in May at McGill Geophysics field school.

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†*Courses marked with a dagger are offered on a regular basis to engineering students. Interested students in other fields may take one or more courses by arrangement with the Department. Courses in which there is insufficient registration will not be given during the current year.*

305 Structural Geology. Half Course. D. J. McDougall

A survey of geological structures and their origins. Elements of structural interpretation. In the laboratory, graphical methods are used for the anlaysis and interpretation of practical problems.

Prerequisite: Geotechnical Science 301, 306.
Lectures: 2 hours per week for one term.
Laboratory: 2 hours per week for one term.
Text: Billings, *Structural Geology*, 2nd ed. (Prentice-Hall).

306 Geotechnical Methods. Half Course. D. J. McDougall

A survey of field and laboratory methods and techniques which is designed as an introduction to the philosophy and practice of geotechnical investigations. Interested students will take this course concurrently with the second half of Geotechnical Science 301.

Lectures: 2 hours per week for second term.
Laboratory: 2 hours per week for second term.

†401 Geomorphology. Half Course. D. J. McDougall

An advanced course in the study of landforms produced by the processes of erosion and deposition by water, wind, glaciation and earth movements. The interrelationship of geologic processes, materials, and structures, soil types, climatic conditions, etc., in the development of topographic forms is emphasised. Suites of maps and air photos plus one full day field trip are used to illustrate the lectures.

Prerequisite: Geology 301.
Lectures: 2 hours per week for one term.
Laboratory: 2 hours per week for one term.
Text: Thornbury, *Principles of Geomorphology*. (Wiley).

†402 Engineering Geology. Half Course. S. Yalcin

Engineering properties of rocks. Ground water. The formation and mechanics of soils including structure, gradation, sedimentation, permeability, compressibility and shearing strength. Application of soil characteristics to typical geotechnical problems in bearing capacity, settlement and lateral earth pressure. Crustal movements and stability of slopes. Frost action in regolith. Laboratory work for experimental determination of above characteristics.

Prerequisite: Geotechnical Science 301.
Lectures: 2 hours per week for Second Term.
Laboratory: 2 hours per week for Second Term.
Text: Krynine and Judd, *Principles of Engineering Geology and Geotechnics*. (McGraw-Hill).

†403 Field Geology (McGill Geology 231c). Half Course.

Surface and underground field mapping methods. Preparation of geological maps, sections and reports from field notes, diagrams, air photos, etc.

Prerequisite: Geotechnical Sciences 301, Engineering 201, 303.
Field School: 2 weeks in May at McGill Field Geology School.
Texts: Lahee, *Field Geology*, 5th ed. (McGraw-Hill).
Mckinstry, *Mining Geology*. (Prentice-Hall).

404 Optical Crystallography. Half Course. D. J. McDougall

The optical properties of non-opaque crystalline substances under the polarizing microscope. In the laboratory, mineral powders are identified by their optical characteristics and by the determination of their refractive indices.

Prerequisite: Geotechnical Sciences 302.

Lectures: 2 hours per week for one term.

Laboratory: 3 hours per week for one term.

Text: Wahlstrom: *Optical Crystallography.* (Wiley).

405 Geology and Mineral Resources of Canada. Half Course. D. J. McDougall

The geology and mineral resources of Canada are described in relationship to the major geomorphic subdivisions. Reading assignments and colloquium are used to provide illustrative material.

Lectures: 2 hours per week for one term.

Colloquium: 1 to 3 hours per week for one term.

Text: *Geology and Economic Minerals of Canada,* 4th ed. (Econ. Geol. Series No. 1, *Geological Survey of Canada.*

406 Petrology. Full Course. D. J. McDougall

A systematic survey of the origins, distribution, classification and identification of the common igneous, sedimentary and metamorphic rocks. In the laboratory megascopic and microscopic properties are studied, using field techniques and the polarizing microscope.

Prerequisite: Geotechnical Science 302, 306.

Lectures: 2 hours per week for two terms.

Laboratory: 3 hours per week for two terms.

Text: Tyrrell, *The Principles of Petrology.*
Moorhouse, *The Study of Rocks in Thin Section.*

407 Economic Mineral Deposits. Full Course. D. J. McDougall

The origins, types of occurence and classification of deposits of important metallic and non-metallic minerals of economic importance.

Prerequisite: Geotechnical Science 302, 305, 406.

Lectures: 2 hours per week for two terms.

Colloquium: 2 hours per week for two terms.
Baterman, *Economic Mineral Deposits.* (Wiley).

HISTORY

F. G. W. Adams.....*Associate Professor*
Rev. H. MacKinnon.....(*Department Chairman*) *Assistant Professor*
D. C. Savage.....*Assistant Professor*
L. L. LaPierre.....*Assistant Professor*
T. A. Sandquist.....*Assistant Professor*

Honours Courses: 311, 312, 313, 314, 315, 411, 412, 413, 414, 415, 416.

General Courses: 201, 202, 203, 301, 302, 303, 401, 402, 403, 404.

101 The Age of Transition, 1300-1789. Full Course.

A survey of the cultural, intellectual, political and social developments in Europe and the expansion of Europe into Africa, Asia and America.

Three hours per week for two terms.

201 History of Canada. Full Course. L. L. LaPierre

A general survey from the establishment of New France to the Second World War with special emphasis on 19th century political and constitutional developments.

Three hours per week for two terms, lectures and seminars.

202 History of Modern Europe, 1789-1939. Full Course. F. G. W. Adams

A survey of the main social, economic, political and intellectual developments in European history from the French Revolution to the Second World War.

Three hours per week for two terms.

203 Introduction to the History of Africa. Full Course. D. C. Savage

Africa before European colonization; British, French, Belgian, German and Portuguese colonial policy; the rise of nationalism.

Three hours per week for two terms.

301 History of England. Full Course. T. A. Sandquist

A general survey from the Anglo-Saxons to the present day.

Three hours per week for two terms.

302 History of United States. Full Course. F. G. W. Adams

A survey of American political, economic and social development from the discoveries to the New Deal.

Three hours per week for two terms.

303 History of the British and French Empires. Full Course.

A comparative survey from the 16th century to the present with emphasis on the development of colonial and imperial policy.

Three hours per week for two terms.

***304 Modern History of India and Pakistan. Full Course.**

A survey of the subcontinent from the Mogul Empire through the eras of European expansion, British rule, and the rise of nationalism to the present.

Three hours per week for two terms.

311 The Renaissance and Reformation. Full Course. F. G. W. Adams

A study of the culture of the Renaissance, the Protestant revolt and the Catholic reaction through the Thirty Years War.

Three hours per week for two terms, lectures and seminars.

***312 The Age of Enlightenment. Full Course.** F. G. W. Adams

A study of European ideas and institutions from the death of Louis XIV to the coming of the French Revolution with emphasis on France.

Three hours per week for two terms, lecturers and seminars.

***313 History of Medieval England. Full Course.** T. A. Sandquist

The social, political and economic development of England during the medieval period.

Three hours per week for two terms, lectures and seminars.

314 History of Tudor-Stuart England. Full Course. T. A. Sandquist

A study of the rise of the new monarchy and the economic, political and religious developments of the period.

Three hours per week for two terms, lectures and seminars.

315 West Africa in the Colonial Era. Full Course.

Emphasis will be placed on the French colonies.

Three hours per week for two terms, lectures and seminars.

401 History of Medieval Europe. Full Course. H. MacKinnon

A survey of the main events of medieval history and of the institutions and peoples which have helped shape western civilization.

Three hours per week for two terms.

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*NB: * beside a course means that the course will not be given in 1962-63.*

402 History of Colonial America. Full Course. L. L. LaPierre

A comparative study of the processes of discovery, conquest, settlement, government, society, and disruption of the various colonies on the American continent during the Colonial Period with emphasis on Latin America and New France.

Three hours per week for two terms.

403 History of South Africa. Full Course. D. C. Savage

A survey of South African history from the 17th century with emphasis on the period of the Boer War and the unification of South Africa.

Three hours per week for two terms.

404 Ecclesiastical History. Full Course. H. MacKinnon

A survey of the history of the Church from the time of the apologists until the thirteenth century with emphasis on the General Councils of the Church and the christological controversies in the early years and on the origins and expansion of monasticism and the problems of church organization and discipline in the medieval period. This course fulfills a theology requirement.

Two hours per week for two terms.

411 Medieval Institutions. Full Course. H. MacKinnon

Aspects of medieval cultural life with emphasis on the development of learning from the Carolingian Renaissance to the foundations of the universities.

Three hours per week for two terms, lectures and seminars.

412 British Political Parties. 1815-1950. Full Course. D. C. Savage

Emphasis on the structure of politics and the role of political parties in modern industrial England.

Three hours per week for two terms, lectures and seminars.

413 History of French Canada. Full Course. L. L. LaPierre

A study of French Canada with emphasis on its political and social development and its relations with English-speaking Canada.

Three hours per week for two terms, lectures and seminars.

***414 History of 19th-century Canada. Full Course.**

A close study of some significant aspects of Canadian development with emphasis on political and economic development.

Three hours per week for two terms, lectures and seminars.

***415 History of East Africa. Full Course.** D. C. Savage

Medieval East Africa; Arab and European domination and the rise of nationalism.

Three hours per week for two terms, lectures and seminars.

416 The Middle East. Full Course. H. Habib

A brief historical and political survey of the area with a study of the modern political institutions of the Middle Eastern States. (This course is also Political Science 217).

Three hours per week for two terms.

An honours course is offered in the history of each of four major areas: European, North American, British and Non-European. Candidates for the Honours B.A. in History are required to take three from among the General courses, six from among the Honours courses as listed above. They are strongly urged to take 101 also in Freshman. There will be a comprehensive examination at the end of fourth year.

Candidates for the General B.A. with the major in History are required to take five General courses after Freshman. They are also urged to take History 101 in Freshman.

Courses leading to the Honours B.A. in History.

First Year: English 101, 106; French; Classics 102 or 121; Mathematics 101; Theology 101; one elective.

Second Year: French; Philosophy 202; Theology; three electives from the General courses.

Third Year: Philosophy 303, 405; Theology; three electives from the Honours History courses.

Fourth Year: Philosophy 404; three electives from the Honours History courses.

Program for the General B.A. with the Major in History.

First Year: The same as in the Honours History Program.

Second Year: Classics 202 or 221; English; French; History 201 or 202 or 203; Philosophy 202; Theology.

Third Year: Two courses from History 301, 302, 303, 304; Philosophy 303; one Philosophy elective; one Science elective; Theology.

Fourth Year: Two courses from History 401, 402, 403, 404; Philosophy 404; one Philosophy elective; Sociology 101, 102.

MATHEMATICS

Rev. E. O'Connor S.J. ..... *(Department Head) Professor*
I. Benjamin ..... *Associate Professor*
A. Prillo ..... *Assistant Professor*
K. N. Majumdar ..... *Assistant Professor*
C. Hewson ..... *Lecturer*

101 Algebra and Trigonometry. Full Course. C. Hewson

(a) Algebra and Graphs. Linear and quadratic functions and their graphs. Ratio and proportion. The progressions. Permutations and combinations. The binomial theorem. Mathematics of investment.

(b) Plane Trigonometry and Analytic Geometry. The trigonometric functions and solution of right-angled triangles. Measurement of angles identical relationships among the functions trigonometric equations. Graphs of the trigonometric functions. Solution of triangles. Logarithms. Discussion of straight line and circle.

Lectures: 3 hours per week for two terms.

106 Analytic Geometry. Half Course.

An elementary study of the straight line and circle, with an introduction to conic sections.

Lectures: 3 hours per week for one term.

Text: Smith, Salkover and Justice, *Analytic Geometry.*

107 Plane Trigonometry. Half Course.

The trigonometric functions and solution of right-angled triangles. Measurement of angles, identical relations among the functions and trigonometric equations. Functions of compound angles, transformations of products and sums. Logarithms. Solution of triangles. Graphs of the trigonometric functions, general solutions of trigonometric equations and inverse functions.

Lectures: 3 hours per week for one term.

Text: Hall and Knight, *Elementary Trigonometry.*

108 Intermediate Algebra. Half Course.

Linear and quadratic functions. Polynomials and algebraic equations. Rational functions, ratio and proportion and systems of equations. Series of numbers; the progressions. Permutations and combinations. Mathematical induction. The binomial theorem and approximations. Mathematics of investment.

Lectures: 3 hours per week for one term.

Text: Rosenbach and Whitman, *College Algebra.* (Ginn).

109 Senior Algebra. Half Course.

Functions. Inequalities and their solutions. Complex Numbers. Theory of Equations. Logarithms. Determinants. Partial Fractions. Infinite Series.

Lectures: 3 hours per week for one term.

Text: Rosenbach and Whitman, *College Algebra.* (Ginn).

202 Elementary Statistics. Half Course.

Frequency distributions—Descriptive measures; Probability; Sampling; Estimation of confidence intervals; Testing hypothesis; Tests for randomness; Linear relations; Correlations.

Lectures: 3 hours per week for one term.
Text: Freund, *Modern Elementary Statistics.* (Prentice-Hall).

203 Theory of Interest. Half Course.

Simple and compound interest; discounts; annuities certain; sinking funds; bonds; elementary interpolation.

Lectures: 3 hours per week for one term.
Text: Simpson, Pirenian and Crenshaw; *Mathematics of Finance.* (Prentice-Hall).

204 Calculus. Half Course.

An introductory course aiming to cover the ordinary techniques and applications of calculus. It includes the following topics: Functions. Limits. Graphs. Slope. Differentiation and integration of polynomial, algebraic, trigonometric, exponential, and logarithmic functions. Applications.

Lectures: 3 hours per week for one term.
Text: Ross R. Middlemiss, *Differential and Integral Calculus.* (McGraw-Hill).

205 Calculus. Full Course.

A first course aiming to cover, as completely as possible the ordinary techniques and applications of calculus. It includes the following topics: Limits of functions. Differentiation and integration of polynomials with applications. The Cauchy integral. Differentiation of algebraic and elementary transcendental functions with applications to kinematics, differential geometry and the solution of equations. Methods of integration and uses of the integral in the calculation of geometric and mechanical quantities. Approximate integration. Theorems concerning integration and the integrals. Power series, Taylor's series, the exponential, circular and hyperbolic functions. Partial differentiation, line integrals, multiple integration. Introductory differential equations.

Lectures: 3 hours per week for two terms.
Text: Ross R. Middlemiss, *Differential and Integral Calculus.* (McGraw-Hill).

206 Analytic Geometry of two and three Dimensions. Half Course.

This course, which begins with conic sections, embraces the chief topics of plane and space geometry that are of common interest to both the science and the engineering student. It includes the following: The principal properties of the parabola, the ellipse, the hyperbola. Coordinate transformations and polar coordinates. Method of distinguishing type of conic from its unreduced equation. Some "higher" plane curves. Parametric equations. Cartesian spherical and cylindrical coordinates in space. Equations of lines, planes, cylinders, cones, and surfaces of revolution. An introduction to the study of quadric surfaces.

Lectures: 3 hours per week for one term.
Text: Smith, Salkover and Justice, *Analytic Geometry.*

208 Algebra. Full Course.

(a) The first part of this course aims at an accurate working familiarity with the following topics: Real numbers, decimal approximations and abbreviated methods of computation. Inequalities. Complex numbers. Formal and functional properties of polynomials, polynomial equations. Rational functions.

(b) The second part embraces the following topics: Solution of cubic and quartic equations by radicals. Systems of linear equations, determinants, matrices, linear transformations (projecture and complex). Symmetric functions of the roots of an equation. Approximation of irrational numbers by rationals, impossibility of angle trisection by ruler and compass. Sequences, limits, summation of series.

Lectures: 3 hours per week for two terms.
Text: Courant and Robbins, *What is Mathematics?*

307 Algebra and Spherical Trigonometry. Half Course.

This course comprises a practical treatment of spherical trigonometry and of the topics of algebra which are necessary for the study of differential equations and are not adequately treated in Maths. 109.

Lectures: 3 hours per week for one term.
Texts: Hart and Hart, *Solid Geometry and Spherical Trigonometry.*
Sokolnikoff, *Higher Mathematics for Engineers and Physicists.*

308 Algebra and Calculus. Half Course.

A continuation of Maths. 205 and 307.

Lectures: 2 hours per week for two terms.
Text: Sokolinikoff, *Higher Mathematics for Engineers and Physicists.*

309 Ordinary Differential Equations. Half Course.

A first course with numerous applications to problems of physics, chemistry, mathematics, and engineering.

Lectures: 2 hours per week for two terms.
Text: Kells, *Elementary Differential Equations.* (McGraw-Hill).

311 Full Course.

(a) Infinite Series and Integrals. A study of the infinite processes used in applied mathematics with a view to securing an effective manipulation.

Lectures: 3 hours per week for one term.

(b) Functions of a Complex Variable. A first course in complex Variable Functions.

Lectures: 3 hours per week for one term.
Text: Knopp, *Theory of Functions.* Part 1.

412 Full Course.

(a) Functions of a Real Variable. A continuation of Math. 311a.

Lectures: 3 hours per week for one term.

Text: Titchmarsh, *The Theory of Functions.*

(b) Functions of a Complex Variable. A continuation of Math. 311b.

Lectures: 3 hours per week for one term.

Texts: Knopp, *Theory of Functions.* Part II.
Titchmarsh, *Theory of Functions.*

***414 Problems of Advanced Calculus. Full Course.**

A series of interesting and difficult mathematical assignments intended to integrate the students' knowledge of algebra, analytic geometry and advanced calculus.

Lectures and Laboratory: 2 hours per week for two terms.

415 Modern Algebra. Full Course.

The structure of number systems: Integral domains, ordering, factorization, fields, continuity, algebraic closure. Groups. Vector spaces. Matrices and linear groups. Algebra of classes. Transfinite arithmetic. Algebraic number fields. Galois theory.

Lectures: 3 hours per week for two terms.

Text: Birkhoff and MacLane, *A Survey of Modern Algebra.*

416 Number Theory. Half Course.

An introduction to the problems and methods of "elementary" and analytic number theory.

Lectures: 3 hours per week for one term.

***417 History of Mathematics. Half Course.**

Lectures: 1 hour per week for two terms.

418 Numerical Analysis. Half Course.

Lectures: 3 hours per week for one term.

Course leading to the Honours B.Sc. in Mathematics.

First Year: Chemistry 101, 102; English 101; French; Mathematics 106, 109, 205; Physcis 101, 102; Theology 101.

Second Year: Chemistry 231 or Physics 220; French; Mathematics 206, 208, 308, 309; Philosophy 202; Theology.

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*NB: * beside a course means that the course will not be given in 1962-63.*

Third Year: English; Mathematics 311, 415; Philosophy 303; Physics 204; Theology.

Fourth Year: Mathematics 412, 416, 417, 418; Philosophy 404; Physics 410 or 420.

Course leading to a General B.Sc. with the major in Mathematics.

First Year: Chemistry 101, 102; English 101; French; Mathematics 106, 107, 108, 109; Physics 101, 102; Theology 101.

Second Year: French; Mathematics 205, 206, 208; Philosophy 202; Physics 220; Theology.

Third Year: Chemistry 231; English; Mathematics 308, 309; Philosophy 303; Physics 204; Theology.

Fourth Year: Mathematics 311; Physics 310 or 421; Philosophy 404; one elective.

MODERN LANGUAGES

Rev. A. Nelson, S.J. ..... (*Department Chairman*) *Associate Professor*
H. H. Lau ..... *Assistant Professor*
A. Michalski ..... *Assistant Professor*
J. J. Couvrette ..... *Lecturer*

FRENCH

102 Full Course. H. H. Lau

Study of excerpts from representative authors relative to French civilization. Semantics and stylistics of the language. The writing of essays. This course is open to Commerce and Science students of First Year who have studied French in High School and who speak French fluently.

Lectures: 2 hours per week for two terms.

106 Full Course. A. J. Nelson

Phonetics and functional grammar along with a graded study of great writers. This is a lecture and laboratory course for students who do not speak French, but who have studied it in High School.

Lectures: 4 hours per week for two terms.
Texts: Varney, *Prononciation française.* (Pleasants).
Stack, *Elementary Oral and Written French.* (Oxford).

107 Full Course. J. J. Couvrette

Representative readings of 19th-century authors in the novel and essay. Contemporary French Canadian novel. Writing of essays. This course is for Arts students of First Year who have studied French in High School and who speak French fluently.

Lectures: 3 hours per week for two terms.

108 Full Course.

Phonetics, functional grammar and composition. This is a lecture and laboratory course for students who have not had High School French.

Lectures: 4 hours per week for two terms.
Texts: Varney, *Prononciation française.* (Pleasants).
Stack, *Elementary Oral and Written French.* (Oxford).

109 Full Course. J. J. Couvrette

Studies in the 19th-century novel and essay, and in the contemporary French Canadian novel. This course is for students who have done their High School studies in French and passed the Grade 11 examination in French.

Lectures: 2 hours per week for two terms.

203 Full Course.

Advanced phonetics and composition. This is an advanced laboratory and lecture course for those with a credit in Course 106.

Lectures: 4 hours per week for two terms.

205 Full Course.

This is a continuation of the lecture and laboratory work of Course 108 which is the prerequisite.

Lectures: 4 hours per week for two terms.

207 Full Course. H. H. Lau

Literary analysis of the contemporary French novel. Stylistics and essay writing. This course is for students who have passed 102 or 107.

Lectures: 2 hours per week for two terms.

209 Full Course. J. J. Couvrette

Advanced study of 20th-century authors in the novel and essay. Contemporary French Canadian novel. Essay writing. This course is for those who passed Course 109 or Grade 12 French in a French School.

Lectures: 2 hours per week for two terms.

GERMAN

110 Scientific German. Half Course.

An introductory course for Science students.

Lectures: 2 hours per week for two terms.

SPANISH

111 Functional Spanish. Full Course. A. Michalski

Essentials of pronunciation and grammar, composition, graded reading of Spanish texts. For students with no previous knowledge of Spanish.

Lectures: 3 hours per week for two terms.
Text: *Modern Spanish*—A Project of the Modern Language Association. (Harcourt-Brace).

211 Intermediate Spanish. Full Course. A. Michalski

Grammar review; practice in conversation; composition; selections from the writings of the 19th and 20th centuries introducing the student to the literature and the civilization of Spain and of Spanish America.

Lectures: 3 hours per week for two terms.
Texts: Lagrone and Romera, Navarro:—*Intermediate Conversational Spanish.*
Marin, *La Civilization Espanola.* (Holt, Rinehart).

PHILOSOPHY

Rev. H. Phelan, S.J. ..... *Professor*
J. Doyle ..... *Assistant Professor*
E. J. Roesch ..... *Assistant Professor*
A. S. Kawczak ..... *Assistant Professor*

201 An Introduction to Philosophy. Half Course.

Lectures: 1 hour per week for two terms.

Text: Sullivan, *An Introduction to Philosophy.* (Bruce).

202 Metaphysics and Logic. Full Course.

This science is the one natural wisdom, and has as its object the understanding of reality in its ultimate intelligibility. Since reality includes God and the physical universe, the ultimate questions of Theodicy and Cosmology find their place here The problem of the one and the many, limitation, causality, substance and accident, the analogy of being, the nature of ontological truth, good and evil are discussed, and the various opinions are considered before the solution is proposed. In order to familiarize the student with the methods of reasoning used in Philosophy, a series of lectures in Logic is given at the start of this course.

Lectures: 3 hours per week for two terms.

Text: Robert J. Kreyche, *First Philosophy, An Introductory Text in Metaphysics.* (Henry Holt).

Psychology and Epistemology. Full Course.

The Philosophical study of Man. This course treats of the unity of Man, his vegetative life, external and internal sensation, intellect, the nature of knowledge; sense appetite, the will, habits, the human soul; the nature, origin and destiny of man. This course includes a study of the main problems of Epistomology.

Lectures: 3 hours per week for two terms.

Text: J. F. Donceel, *Philosophical Psychology.* (Sheed and Ward).

304 Symbolic Logic and Application. Half Course. A. S. Kawczak

Presentation of the methods of symbolic logic and some of its applications to the analysis of the structure of axiomatic and empirical sciences.

Lectures: 3 hours per week for one term.

Text: Patrick Suppes, *Introduction to Logic.* (Van Nostrand).

(A full-course expanded version of this was given in 1961-62).

305 Philosophy of Science. Half Course. A. S. Kawczak

The purpose of this course is to provide knowledge of the main methodological problems arising in modern science. It includes the following topics: Formal deductive systems. Logistic systems. Pure and applied mathematics. Laws in natural sciences. The justification of induction. Confirmation theory. Probability. Scientific explanation. Theoretical concepts. Models. Idiographic and normative disciplines. Value statements.

Lectures: 3 hours per week for one term.

404 Ethics. Full Course. H. P. Phelan

(a) General Principles of Morality. Ethics may be defined as the "philosophic science which establishes the moral order of human acts." This first section deals with the end of man, the human act, morality, duty and law, sanction and merit, properties of the Natural Law, conscience, virtue and vice. These principles are used in the remainder of the course to study the particular obligations which arise from the Natural Law.

(b) Applied Ethics. (1) Principles of Individual Ethics, Man's private obligations toward God, self and his fellow man form the matter of the second section. It treats of religion, duties with regard to one's soul and body, certain external advantages to the individual, our fellow man, justice and right, objects of natural rights, property and property titles, contracts, non-juridical obligations. (2) Principles of Social Ethics. The third section covers man's obligations as a social being. It studies man's social nature, conjugal society, the family, the state, the authority of the state, the constitution of a state, the functions of government, scope of civil legislation, executive and juridical powers, duties of citizens, international relations, occupational groups.

Lectures: 3 hours per week for two terms.

Texts: Higgins, *Man as Man.* (Bruce).
Leibell, *Readings in Ethics.* (Loyola Univ. Press).

405 History of Ancient Greek Philosophy. Half Course.

Lectures: 3 hours per week for one term.

406 History of Medieval Philosophy. Half Course.

Lectures: 3 hours per week for one term.

407 History of Modern Philosophy. Full Course. A. S. Kawczak

Lectures: 3 hours per week for two terms.

408 Philosophical Movements in the nineteenth and twentieth centuries. Full Course. A. S. Kawczak

Lectures: 3 hours per week for two terms.

Course leading to a General B.A. with the Major in Philosophy.

First Year: English 105, 106; French; Mathematics 101; Classics 102 or 121; History 101; Theology 101.

Second Year: Classics 202 or 221; English; French; Philosophy 201, 202; Theology 207; Theology elective.

Third Year: Philosophy 303, 407, 409; Science elective; Theology 204; one elective.

Fourth Year: Philosophy 304, 305, 404, 405, 406; Sociology 101, 102; one elective.

PHYSICS

Rev. H. J. MacPhee, S.J. ..... *(Department Head) Professor*
C. E. Eappen ..... *Assistant Professor*
N. de Takacsy ..... *Lecturer*
E. A. MacPhee ..... *Lecturer*
L. C. Smith ..... *Lecturer*

101 General College Physics. Full Course. E. A. McPhee

An introductory course on the elements of mechanics, sound, heat, electricity and light.

Lectures: 3 hours per week for two terms.
Text: Sears and Zemansky, *College Physics*. (Addison-Wesley).

102 Laboratory experiments in Physics 101. Half Course.

One period per week for two terms.
Laboratory Manual: Keys, Watson and MacPherson, *Experimental Physics*. (Renouf).

201 Light and Sound. Half Course. N. deTakacsy

A fuller treatment of these parts of General Physics. A concurrent course in calculus is supposed.

Lectures: 3 hours per week for First Term.
Text: Sears, *Optics*. (Addison-Wesley).

202 Laboratory experiments in Heat, Light and Sound. Half Course.

One period per week for two terms.

Laboratory Manual: Keys and Terroux, *Heat, Light and Sound.*

204 Electricity and Megnetism. Full Course. H. MacPhee

Electrostatic fields, capacitance, dielectrics, direct currents, thermoelectricity, magnetic fields, electromagnetic induction, instruments, alternating currents, Maxwell's equations.

Lectures: 2 hours per week for two terms.
Text: Duckworth, *Electricity and Magnetism*. (Macmillan).

205 Laboratory course in Electricity and Magnetism. L. C. Smith

Laboratory: 1 period per week for two terms.

206 Properties of Matter. Full Course. C. E. Eappen

Acceleration due to gravity, gravitation, gyroscopic motion, elasticity, surface tension, viscosity, kinetic theory, osmosis, diffusion, vibrations, wave-motion.

Lectures: 2 hours per week for two terms.
Laboratory: 1 period per week for two terms.
Text: Newman and Searle, *Properties of Matter*. (Arnold).

220 Algebra and Vector Theory. Full Course. H. MacPhee

Elements of Modern Algebra, Matrix theory and Vector analysis.

Lectures: 2 hours per week for two terms.
Text: Benner, Newhouse et al., *Topics in Modern Algebra*. (Harper).

***302 History of Science. Half Course.** E. O'Connor

The beginnings of Science in the East; the Egyptian, Greek-Roman, "Dark" Ages, Hindu and Arabian, Medieval, Renaissance and Modern Science. Science and Invention of last three centuries.

Lectures: 1 hour per week for two terms.
Text: Sedgwyck and Tyler, *A Short History of Science.*

303A Electricity. Half Course. L. C. Smith

Electrostatic fields, capacitance, dielectrics, direct current circuits. One term of Calculus is prerequisite.

Lectures: 3 hours per week for one term.
Text: Sears, *Electricity and Magnetism*. (Addison-Wesley).

303B Magnetism. Half Course. L. C. Smith

A continuation of 303A covering magnetic fields, electro-magnetic induction, electrodynamics, a.c. circuits, electronics.

Lectures: 3 hours per week for one term.
Text: Sears, *Electricity and Magnetism*. (Addison-Wesley).

304 Heat. Half Course. N. deTakacsy

An introductory course in thermodynamics and kinetic theory. It includes the first and second laws of thermodynamics with ample applications and introduces the Helmholtz and Gibbs functions.

Lectures: 3 hours per week for one term.
Text: Sears, *Introduction to Thermodynamics*. (Addison-Wesley).

***305 Thermodynamics and Statistical Mechanics. Full Course.**

Lectures: 6 hours per week for one term.

***306 Introduction to Modern Physics. Full Course.**

Lectures: 3 hours per week for two terms.
Laboratory: 1 period per week for two terms.

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*NB: * beside a course means that the course will not be given in 1962-63.*

307 Electronic Circuits. Full Course. L. C. Smith

Characteristics of vacuum tubes and semi-conductors, rectifiers, triodes and transistors as circuit elements, basic amplifier principles, feed-back, special circuitry, electronic instruments, tuned circuits.

Lectures: 3 hours per week for First Term;
1 hour per week for Second Term.

Laboratory: 1 period a week for two terms.

Text: *Fundametnals of Semi Conductors and Tube Electronics* by H. A. Romanowitz. (Wiley).

***310 Introduction to Theoretical Mechanics. Full Course.**

Fundamental principles, statics of a particle and of a rigid body, work and energy, gravitation, principle of virtual work, a particle in a uniform force field, harmonic oscillator, motion of a system of particles, plane motion of a rigid body, central force fields, motion of a particle in an accelerated reference frame, motion under constraints, motion of a rigid body in three dimensions.

Lectures: 3 hours per week for two terms.

Text: Becker, *Introduction to Theoretical Mechanics.* (McGraw-Hill).

***320 Operational Mathematics. Full Course.**

Lectures: 3 hours per week for two terms.

401 Optics. Half Course.

Principles of geometric and of physical optics, interference, diffraction, polarzation, dispersion, radiation and spectra, magnets and electro-optics, light scattering.

Lectures: 3 hours per week for one term.

Texts: Morgan, *Optics.* (McGraw-Hill).
Wood, *Physical Optics.* (Macmillan).

402 Atomic Physics. Half Course. C. E. Eappen

Advent of quantum mechanics and relativity; atoms and quanta; spectroscopy; the nuclear atom; Rutherford, Bohr theory of hydrogen spectrum; Bohr-Sommerfeld quantization; Uncertainty principle; further details of atomic spectra; Zeeman effect.

Lectures: 1 hour per week for two terms.

Text: Van Name, *Modern Physics.* (Prentice-Hall).

403 Electromagnetic Theory. Full Course. N. deTakacsy

Analysis of electrostatic and electromagnetic field; non-stationary fields and Maxwell's equations; Waves in source-free space; electromagnetic radiation; basic relativistic electrodynamics.

Lectures: 3 hours per week for two terms.

Text: Panofsky and Phillips, *Classical Electricity and Magnetism.* (Addison-Wesley).

404 Modern Physics. Full Course.

Lectures: 3 hours per week for two terms.
Laboratory: 1 period per week for two terms.
Text: Leighton, *Principles of Modern Physics.* (McGraw-Hill).

***405 Special Laboratory Projects. Full Course.**

Laboratory: 1 period per week for two terms.

410 Theoretical Mechanics. Full Course. H. MacPhee

D'Alembert's principle, variational principles, Lagrange's equations, Hamilton's principles, scattering in central-force field, kinematics of rigid body motion, rigid body equations of motion, special relativity, Hamilton's equations of motion, canonical transformations, Hamilton-Jacobi theory, small oscillations, continuous systems and fields.

Lectures: 3 hours per week for two terms.
Text: Goldstein, *Classical Mechanics.* (Addison-Wesley).

***420 Partial Differential Equations of Mathematical Physics. Full Course.**

Lectures: 3 hours per week for two terms.

421 Mathematics of Physics and Chemistry. Full Course.
N. deTakacsy

Selected topics to prepare students of General Science to read books on quantum mechanics.

Lectures: 3 hours per week for two terms.

Subjects required for an Honours B.Sc. in Physics.

First Year: Chemistry 101, 102; English 101; French; Mathematics 106, 109, 205; Physics 101, 102; Theology 101.

Second Year: English; French; Mathematics 206, 308, 309; Physics 204, 205, 206, 220; Theology; Philosophy 202.

Third Year: Mathematics 202; Philosophy 303; Physics 305, 306, 307, 310, 320; Theology.

Fourth Year: Philosophy 404; Physics 401, 403, 404, 405, 410, 420.

To enter the first year of the Honours Physics course one's Junior Matriculation papers must have included Intermediate Algebra and Trigonometry. A Junior Matriculation average of 70% with 75% in Science and Mathematics are also required.

Subjects required for a General B.Sc. in Physics.

First Year: Chemistry 101, 102; English 101; French; Mathematics 106, 107, 108, 109; Physics 101, 102; Theology 101.

Second Year: French; Mathematics 205, 206; Philosophy 202; Physics 201, 202, 303A; Theology.

Third Year: English; Mathematics 307, 308; Engineering 210; Philosophy 303; Physics 205, 303B, 304; Theology.

Fourth Year: Mathematics 309; Engineering 310; Philosophy 404; Physics 302, 307; one elective.

SOCIOLOGY

101 General Sociology. Half Course.

Social groups, social processes, culture, social and cultural changes.

Lectures: 3 hours per week for one term.

Texts: Timasheff, Facey, Schlereth, *General Sociology.* (Bruce).
Zahn, *Readings in Sociology.* (Newman).

102 Social Problems. Half Course.

Population, Immigration, War, Juvenile Delinquency, Crime, Labor, Unemployment, Sterilization, Divorce, Housing Problem, Health, Mental Deficiency and Mental Diseases, Poverty and Dependency, Aging, Interracial Problems.

Lectures: 3 hours per week for one term.

Texts: Mihanovich, Schuyler, *Current Social Problems.* (Bruce).
Blishen, Jones, Neagle, Porter, *Canadian Society.* (Macmillan).

POLITICAL SCIENCE

H. P. Habib.....*Assistant Professor*

201 An Introduction to Political Science. Full Course. H. P. Habib

A basic course in the fundamentals and significance of Political Science.

Lectures: 3 hours per week for two terms.

Text: E. Schultz *Essentials of Government.* (Prentice-Hall).

217 The Middle East. Full Course. H. P. Habib

A brief historical and political survey of the area, with a study of the modern political institutions of the Middle Eastern states.

Lectures: 3 hours per week for two terms.

Text: S. Fisher, *The Middle East.* (Knopf).

***237 International Law and Diplomacy. Full Course.**

An introductory course.

Lectures: 3 hours per week for two terms.

Text: O. Svarlien, *Introduction to the Law of Nations.* (McGraw-Hill).

***251 Canadian Government. Half Course.**

A study of the Canadian Political Institutions.

Prerequisite: Political Science 201 or equivalent.

Lectures: 3 hours per week for one term.

Text: R. MacG. Dawson, *Government of Canada.*

***257 American Government. Half Course.** H. P. Habib

A study of the American Political Institutions.

Prerequisite: Political Science 201 or equivalent.

Lectures: 3 hours per week for one term.

Text: J. Burns, J. Peltason, *Government of the People.* (Prentice-Hall).

271 International Relations. Full Course.

An introduction to the study of International Relations.

Lectures: 3 hours per week for two terms.

Text: C. Schleicher, *Introduction to International Relations.* (Prentice-Hall).

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*NB: * beside a course means that the course will not be given in 1962-63.*

311 Comparative Study of Governments. Full Course. H. P. Habib

An analysis and comparative study of the structures and functions of the governments of the United Kingdom, France, Germany and the U.S.S.R.

Prerequisite: Political Science 201 or equivalent.

Lectures: 3 hours per week for two terms.

Text: Carter, Ranney, Herz, *Major Foreign Powers.* (Harcourt, Bruce).

317 Political Theory. Full Course.

A history of political thought from Plato to the present.

Prerequisite: Political Science 201 or approval of the Political Science Department.

Lectures: 3 hours per week for two terms.

Text: A. Hacker, *Political Theory.* (Macmillan).

371 Senior Seminar. Half Course.

A seminar on Political Thought or Political Institutions.

Seminar: Tutor will direct work in first term; 2 hours per week for second term.

Courses leading to a B.A. with a major in Political Science.

First Year: English 105, 106; French; Classics 102 or 121; Mathematics 101; Theology 101; History 101 or Economics 102.

Second Year: English; French; Classics 202 or 221; Philosophy 202; Theology; Political Science 201.

Third Year: Philosophy 303; Theology; Political Science 311; Economics or History; two electives; one Philosophy (half-course) elective.

Fourth Year: Philosophy 404; Political Science 317 plus a Seminar; three electives; one Philosophy (half-course) elective.

A major in Political Science is made up of *five* full courses in the subject, plus a Senior Seminar given by the Department of Political Science. A student majoring in Political Science must include in his program Political Science 201, 311 and 317. The five electives in Third and Fourth Years may be chosen from the following: Political Science 217, 237, 251, 257, 271; Economics 301, 312; History 203, 304; Sociology 101 and 102. The choice, however, must be such as to ensure at least five full courses in Political Science in the four years.

THEOLOGY

Rev. E. O'Brien, S.J. ..... *(Department Chairman) Professor*
Rev. L. Stanford, S.J. ..... *Associate Professor*
Rev. P. Dickinson, S.J. ..... *Lecturer*
Rev. W. Hannah ..... *Lecturer*
Rev. R. Limoges, S.J. ..... *Lecturer*
Rev. G. O'Brien, S.J. ..... *Lecturer*

101 Survey Course in Theology. Full Course. E. O'Brien, G. O'Brien

A brief treatment of the main points of Theology; Trinity, Life of Grace, Original Sin, Redemption, the Church, Mass and the Sacraments.

Introduction to Sacred Scripture:

(1) Basic terms: Revelation, Inspiration, Inerrancy, Literary forms, Development of doctrine, Scriptural Canon, Criticism and Interpretation, Biblical Theology and Tradition, etc.

(2) Basic Background: Historical, political, religious and cultural milieux affecting the major books of Scripture.

(3) Basic Readings: Introduction to, and selected readings from, the principal classes of sacred writing, with a view to grasping some of the fundamental themes that are keys to understanding the books.

Lectures: 2 hours per week for two terms.

201 Scriptures I & II: Old and New Testaments. Full Course. G. O'Brien

The lectures will introduce and comment on each of the sacred books. Basic problems peculiar to major works (such as Genesis I-XI, Job, The Synoptics, Romans, etc.) will be treated. Emphasis on special areas or problems will be determined by the particular interests of the students, grouped accordingly for discussion sessions, papers and research. Pivotal Semitic ideas and biblical themes of Old and New Testaments will be interrelated. The important archaeological discoveries of recent times, especially of the Dead Sea Scrolls, will be discussed.

Lectures: 2 hours per week for two terms.

203 Ecclesiastical History. Full Course. H. MacKinnon

A survey of the history of the Church from the time of the apologists until the thirteenth century, with special reference to the General Councils of the Church and the christological controversies in the early years and to the origins and expansion of monasticism and the problems of church organization and discipline in medieval period.

Lectures: 2 hours per week for two terms.

Text: Philip Hughes, *The Church in Crisis.* (Doubleday).

204 Theological Texts of St. Thomas. Full Course. L. Stanford

The doctrine of St. Thomas Aquinas on the nature of Theology, the Trinity, Creation, the Fall, the Virtues, the Incarnation, the Church, and the Last Things.

Lectures: 2 hours per week for two terms.

Texts: *St. Thomas Aquinas—Theological Texts.*

205 Theology of Grace and Liturgical Worship. Full Course.

Pelagianism, Semi-Pelagianism. Nature, need and causes of Grace. Special emphasis on the Mass—its nature and meaning, need and problems of active lay participation. The Eucharist as Sacrament and Sacrifice.

Lectures: 2 hours per week for two terms.

206 The Church - the Mystical Body of Christ. Full Course.

Study of the historical development of the Church in the Old Testament—fulfillment and transcendence of promises of the old Covenant by the Kingdom of God founded by Christ—the final fulfillment and perfection of the Church after Christ's second coming—importance of the resurrection of Christ—resurrection of the body and the re-generation of the world. Nature of the Church in our time—study of the functions and obligations of the hierarchy with emphasis on the layman's role in the Church's development—Church seen as the Mystical Body of Christ.

Lectures: 2 hours per week for two terms.

207 The God of Reason. Full Course. L. Stanford

Course in Natural Theology. The existence, nature and attributes of God as knowable without supernatural revelation.

Lectures: 2 hours per week for two terms.

208 Habits, Virtues and Vices. Full Course. L. Stanford

Questions 49-89 of the Summa Theologiae, I-II. Intellectual and moral virtues, theological virtues, the Gifts, Beatitudes, Fruits of the Holy Ghost. Causes of sin, original sin, debt of punishment.

Lectures: 2 hours per week for two terms.

209 The Sacraments. Full Course. W. Hannah

Baptism, Confirmation, Penance, Orders, Extreme Unction, with a special treatment of Marriage.

Lectures: 2 hours per week for two terms.

210 The Eastern Churches and the Theology of Prayer. Full Course.
P. Dickinson

The Theological positions of the oriental Churches, their history and development. The aim is an informed sympathy with eastern Christians, and a basic grasp of their great theological importance today.

What happens theologically in the Christian's ordinary communion with God Certain problems on grace, and other major difficulties concerning prayer will be treated.

Lectures: 2 hours per week for two terms.

211 Anglicanism: its History, Theology, and Place in Christendom. Full Course. W. Hannah

The History of Anglicanism from Henry VIII to the present day. The various theological trends of Anglicanism will be dealt with, and also the question of Anglican orders. The general nature and spirituality of Anglicanism and its place in the Ecumenical movement will be included.

Lectures: 2 hours per week for two terms.

212 An Introduction to Newman. Full Course. G. MacGuigan

The course will begin with the autobiographical writings and move from the Sermons through the controversies to his fully developed theological and philosophical inquiries.

Lectures: 2 hours per week for two terms.

FEES

SCHOLASTIC YEAR

1962-1963

REGULATIONS REGARDING PAYMENT OF TUITION AND FEES

Tuition and Fees are due and payable at the time of registration. However, where this is not possible, a student may with the consent of the Bursar pay Tuition and Fees in two installments, the first at registration and the second on January 15th following. In such cases an installment fee of $10.00 will be charged.

GENERAL FEES - TUITION

ARTS (General Course)		
All years	$175.00 per half year	$350.00 per year
ARTS (with pre-Medical subjects)		
Freshman and Sophomore	$175.00 per half year	$350.00 per year
Junior and Senior	$200.00 per half year	$400.00 per year
SCIENCE		
All years	$200.00 per half year	$400.00 per year
ENGINEERING		
All years	$225.00 per half year	$450.00 per year
COMMERCE		
All years	$175.00 per half year	$350.00 per year

RESIDENCE FEES

Board and Room	$360.00 per half year	$720.00 per year

DEPOSITS REQUIRED OF RESIDENT STUDENTS

Room Deposit—Payable on application for room reservation. (returnable—see remarks below)	$ 50.00
Deposit to cover books, laundry and incidentals payable at registration	100.00

STUDENT ACTIVITY

Council of Student Representatives, Athletics, Drama, Debating, Publications, etc. (payable at Registration)	$ 30.00

SPECIAL

PAYABLE AT REGISTRATION

Registration Fee (payable on first entrance only)	$ 5.00
Late Registration Fee	5.00
Library Fee	5.00
Laboratory Breakage Fee (non-returnable)	
Arts (pre-medical)	
Sophomore, Junior and Senior	15.00
Science and Engineering—All years	15.00

PAYABLE JANUARY 15th FOLLOWING REGISTRATION

Graduation Fee—All years	20.00

PAYABLE ON DATE OF EACH APPLICATION

Engineering Elementary Survey School Course fee	50.00
Caution deposit (returnable)	10.00
Surveying Summer Course	35.00
Supplemental examinations, each	5.00
Supplemental examinations on other than assigned days	10.00
Transcripts (Full)	1.00
Transcripts (Partial)	.50
Resident students staying during the Christmas holidays per day	3.50
Infirmary, per day	4.00

REMARKS

1. No deduction is made for a continuous absence less than a quarter.
2. Any student who is forced to withdraw from a course or from the College is required to notify the Registrar in person or in writing.
3. Where arrangements have been made with the Bursar to pay fees in two installments the second installment will be due and payable on January 15th, without notice.
4. No student will be promoted from one class to another, or receive any degree, diploma or certificate whatsoever, until his financial accounts have been previously and satisfactorily settled.
5. No room will be reserved for any student unless he makes a deposit of $50.00 against the room fee. This deposit will be returned if and only if the application for the room is cancelled by September 1st. If a room is occupied at the beginning of a term, the room fee must be paid for the entire term.
6. The College will pay no debt contracted by the students unless a deposit is left with the Bursar. Large sums of money should not be left in the keeping of the students.
7. Any injury done to the walls or furniture of the College will be charged to the offender's account.
8. Drafts, cheques, money-orders, etc., should be made payable at par to "Loyola College" and addressed to the Bursar, Loyola College, Montreal.